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U.S. AIP SECTIONS:
RAC-9

January 21, 1982

Next
Issue

May 13, 1982

Graphic Notices and Supplemental Data

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GRAPHIC NOTICES AND SUPPLEMENTAL DATA

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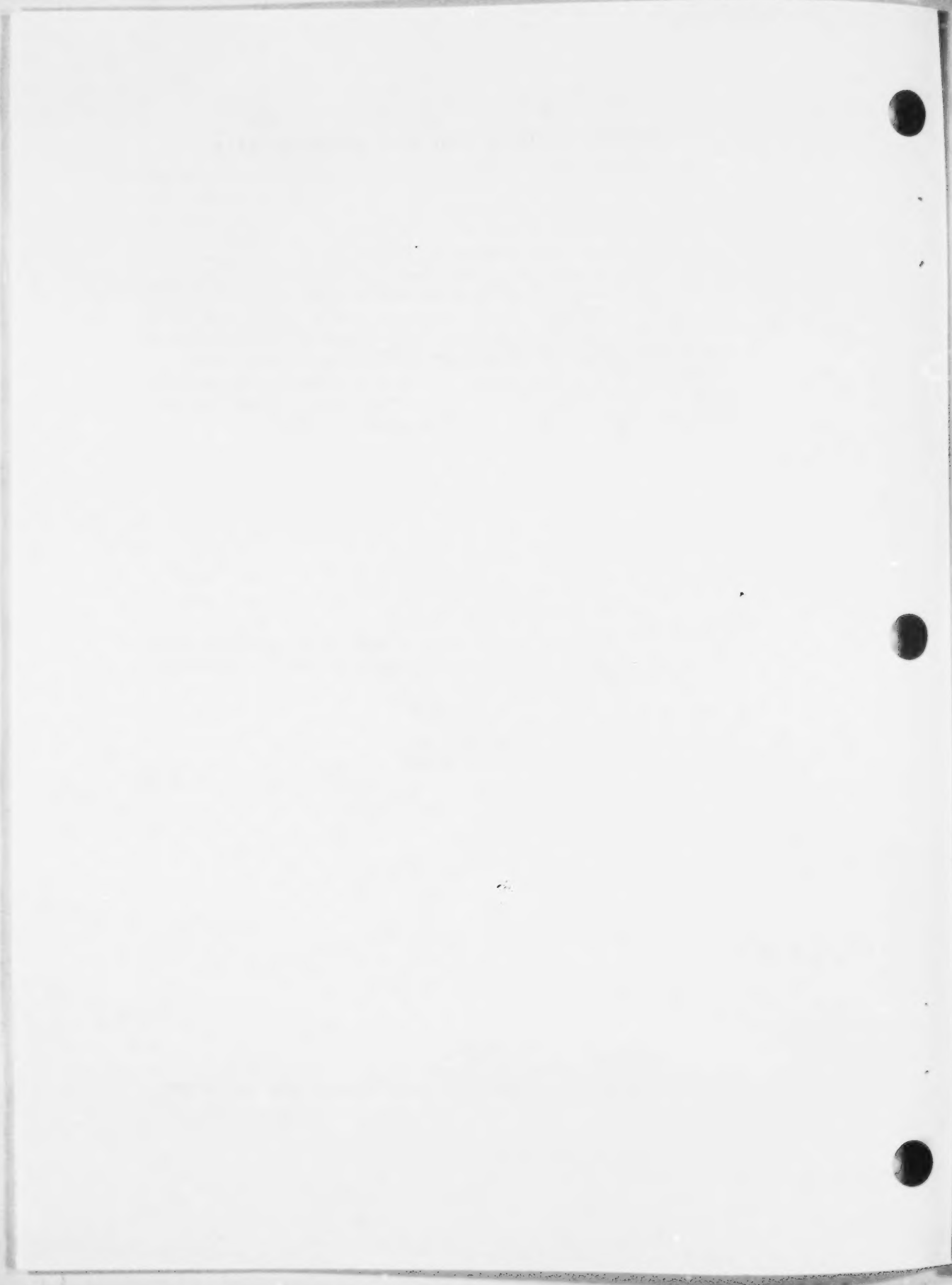
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NOTICE

To attain common effective dates for related Air Traffic Service publications, beginning January 21, 1982 the Graphic Notices and Supplemental Data will be issued every 16 weeks. The issue dates for 1982 as follows:

January 21, 1982
May 13, 1982
September 2, 1982
December 23, 1982



NOTICE TO THE EDITOR

The following comments/corrections are submitted concerning the information contained in the paragraph titled _____ on page _____ of the Graphics Notices and Supplemental Data, dated _____.

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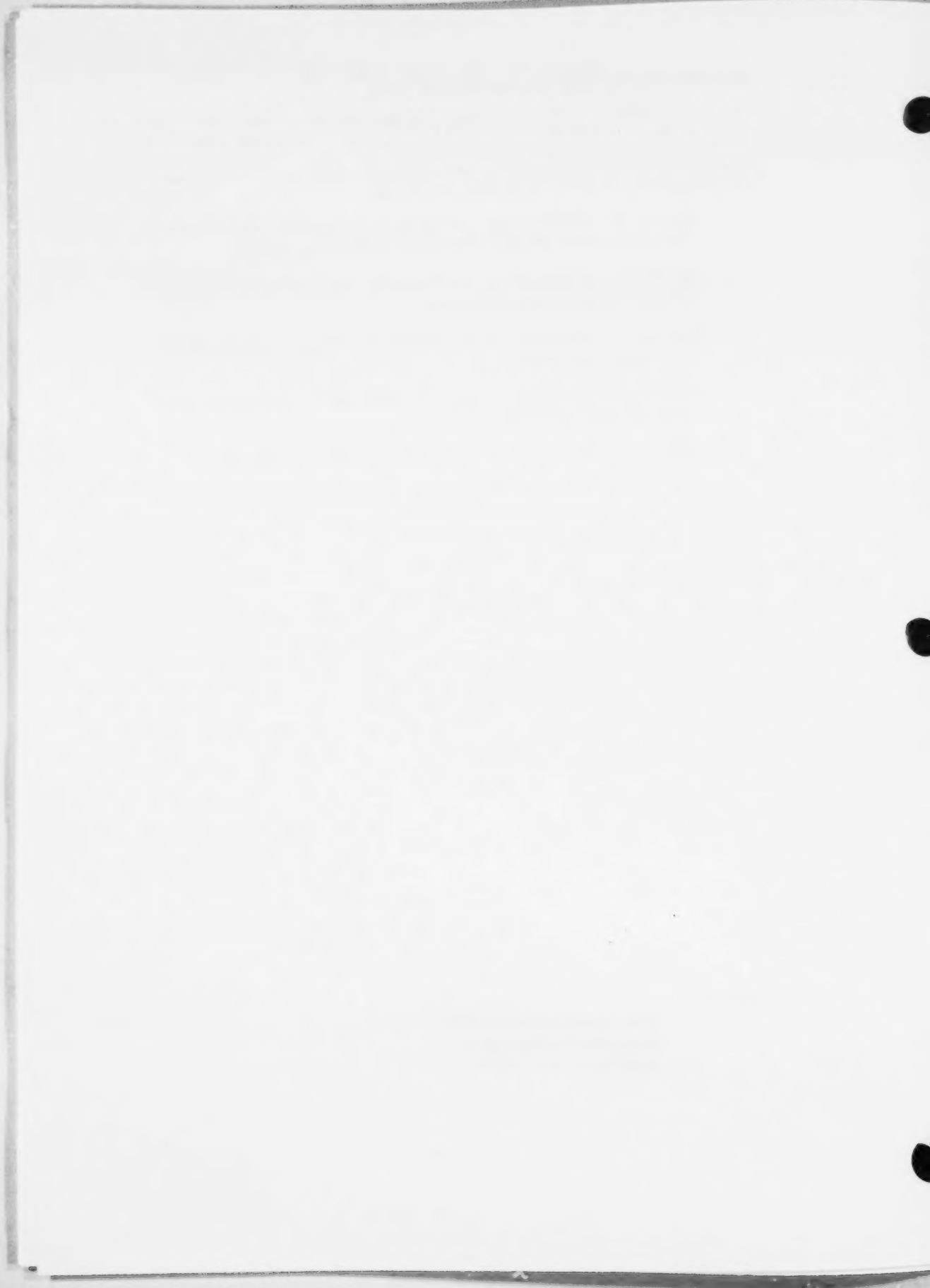
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FOREWORD

Graphics Notices and Supplemental Data is a publication containing aeronautical data, area notices or navigational route information which is supplemental to other operational aeronautical publications and charts. Data contained in this publication is, generally, not subject to frequent change. Data in the tabulation of North American Routes (NAR) requiring revision prior to the next scheduled printing of this publication, will be revised in the publication *Notices to Airmen (Class II)*. These revisions will appear only once, so users are advised to tear them out of the *Notices to Airmen* and insert them in this publication until the next issue. *Graphic Notices and Supplemental Data* is published every 16 weeks and is available through subscription from the Superintendent of Documents.

Graphic Notices and Supplemental Data also serves as the section RAC-9 in the *United States Aeronautical Information Publication*. The US AIP, issued in one volume, is the basic aeronautical information document published for international use and contains information of a lasting character, essential to international air navigation. It is available in English only and is maintained on a current basis by amendment service every 16 weeks consisting of a checklist, reprinted pages and, in the case of minor amendments, manuscript corrections. This publication is a loose leaf publication made to fit a standard three ring binder. Subscriptions are available through the Superintendent of Documents. A subscription consists of the basic issue and seven amendments.

This manual is complementary to other publications which are available upon separate subscription. These publications are:

Airmen's Information Manual (Basic Flight Information and ATC Procedures)—A publication containing the basic fundamentals required in order to fly in the U.S. NAS. It also contains items of interest to pilots concerning health and medical facts, factors affecting flight safety, a pilot/controller glossary of terms used in the Air Traffic Control System, and information on safety, accident and hazard reporting.

Notices to Airmen (Class-II)—A publication containing current Notices to Airmen (NOTAMs) which are considered essential to the safety of flight as well as supplemental data affecting the other operational publications listed here. It also includes current FDC NOTAMs, which are regulatory in nature, issued to establish restrictions to flight or amend charts or published Instrument Approach Procedures. This publication is issued every 14 days and is available through subscription from the Superintendent of Documents.

Airport/Facility Directory, Alaska Supplement, Pacific Supplement—These publications contain information on airports, communications, navigational aids, instrument landing systems, VOR receiver check points, preferred routes, FSS/Weather Service telephone numbers, Air Route Traffic Control Center (ARTCC) frequencies, part-time control zones, and various other pertinent, special notices essential to air navigation. These publications are available upon subscription from the National Ocean Survey (NOS), Distribution Division (C-44), Riverdale, Maryland 20840.

FEDERAL AVIATION ADMINISTRATION

The Federal Aviation Administration is responsible for insuring the safe and efficient use of the Nation's airspace, by military as well as civil aviation, for fostering civil aeronautics and air commerce in the United States and abroad, and for supporting the requirements of national defense.

The activities required to carry out these responsibilities include: safety regulation; airspace management and the establishment, operation, and maintenance of a civil-military common system of air traffic control and navigation facilities; research and development in support of the fostering of a national system of airports, promulgation of standards and specifications for civil airports, and administration of Federal grants-in-aid for developing public airports; various joint and cooperative activities with the Department of Defense; and technical assistance (under State Department auspices) to other countries.

FLIGHT INFORMATION PUBLICATION POLICY

The following is, in essence, the statement issued by the FAA Administrator and published in the December 10, 1964, issue of the Federal Register, concerning the FAA policy as pertaining to the type of information that will be published as NOTAMs and in the Airman's Information Manual.

It is a pilot's inherent responsibility that he be alert at all times for and in anticipation of all circumstances, situations and conditions which affect the safe operation of his aircraft. For example, a pilot should expect to find air traffic at any time or place. At or near both civil and military airports and in the vicinity of known training areas, a pilot should expect concentrated air traffic although he should realize concentrations of air traffic are not limited to these places.

It is the general practice of the agency to advertise by NOTAM or other flight information publications such information it may deem appropriate: information which the agency may from time to time make available to pilots is solely for the purpose of assisting them in executing their regulatory responsibilities. Such information serves the aviation community as a whole and not pilots individually.

The fact that the agency under one particular situation or another may or may not furnish information does not serve as a precedent of the agency's responsibility to the aviation community; neither does it give assurance that other information of the same or similar nature will be advertised nor does it guarantee that any and all information known to the agency will be advertised.

Consistent with the foregoing, it shall be the policy of the Federal Aviation Administration to furnish information only when, in the opinion of the agency, a unique situation should be advertised and not to furnish routine information such as concentrations of air traffic, either civil or military. The Airman's Information Manual will not contain informative items concerning everyday circumstances that pilots should, either by good practice or regulation, expect to encounter or avoid.

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AREA ADVISORIES

THE FOLLOWING ADVISORIES CONTAIN AERONAUTICAL INFORMATION THAT DOES NOT CONCERN A SPECIFIC AIRPORT OR NAVAID, OR FAILS, FOR SOME OTHER REASON, TO MEET THE CRITERIA FOR INCLUSION INTO OTHER PERMANENT BASE LINE PUBLICATIONS SUCH AS THE *AIRPORT/FACILITY DIRECTORY*. SUCH INFORMATION WILL BE AUTOMATICALLY TRANSFERRED TO THIS PUBLICATION FROM THE *NOTICES TO AIRMEN* (CLASS II) PUBLICATION WHEN THE ORIGINATOR INDICATES THAT THE ADVISORY IS EITHER PERMANENT OR EXPECTED TO REMAIN CURRENT LONG ENOUGH TO WARRANT PUBLICATION HERE. THESE ADVISORIES ARE GROUPED UNDER STATE HEADINGS, AND, WHERE APPROPRIATE, UNDER CITY OR GEOGRAPHIC LOCATIONS. ADVISORIES THAT PERTAIN TO MORE THAN ONE STATE OR REQUIRE A FULL PRINTED PAGE WILL BE INCLUDED UNDER THE *GENERAL* HEADING. THE NUMBER IN PARENTHESIS FOLLOWING EACH ENTRY IS THE MONTH AND YEAR THAT THE ADVISORY WAS ISSUED.

ARIZONA

THE GRAND CANYON CAVERNS AREA: Quarry located 3 miles west-southwest of Grand Canyon Caverns Landing Strip. Aircraft are cautioned to avoid this area during daylight hours, if necessary to fly over the area maintain a minimum altitude of 4000 feet AGL due to possible damage from flying rocks or turbulence caused by blasting. (3/78)

CALIFORNIA

SALINAS RIVER AND OCEAN SHORELINE: Avoid flying below 1000 feet over a 400 acre Wildlife Refuge along the south side of the mouth of the Salinas River and ocean shoreline eastward. (1/76)

PALOMAR OBSERVATORY: All pilots are requested to avoid flying over the Palomar Observatory located on the Julian VORTAC 296° radial/22 DME. (4/81)

DISTRICT OF COLUMBIA

WASHINGTON NATIONAL AIRPORT: Turbojet policy except under emergency conditions and subject to observance of noise abatement procedures, only those turbojet aircraft meeting the following criteria can be accommodated: A. Approved types of turbojet aircraft to short or medium range engaged in (1) Government, corporation, charter, or rental types of operation, (2) Air carrier (including supplemental air carriers) and commercial operator training charter, or

familiarization flights, and (3) Scheduled air carrier operations. B. The currently approved types of turbojet aircraft are as follows: (1) Jetstar (C-140) (2) Sabreliner (T-39) (3) Morane Saulnier 760 (4) Jet Commander (Aero Commander) (5) Learjet (6) Hawker Siddeley DH-125 (7) Hansa Jet HFB 320 (8) Fan Jet Falcon (9) Caravelle (10) DC-9 series 10, 30, 50, and 80 (11) BAC-111 (12) Boeing 727 series thru 200 approved under controlled conditions, (13) Boeing 737 series 100 and 200 (14) Gulfstream II (15) Cessna Model 500 Citation C Fokker F-28. Turbojet aircraft not listed above must secure advance authorization from the Airport Manager at least 48 hours before planned arrival time. C. Turbojet aircraft described in paragraph B (9) through (13) may not be operated into or out of airport on a flight segment of more than 650 statute miles except for non stop flights of less than 1000 miles operating to or from the following cities: Miami, Fla., Memphis, Tenn., Minneapolis, Minn., Orlando, Fla., St. Louis, Mo., Tampa, Fla., West Palm Beach, Fla. Runway 15 available all jet takeoffs. No runway in position prior to takeoff. Rolling takeoffs only. In the interest of noise abatement, all non-scheduled turbojet operators are requested not to land at or takeoff from Washington National Airport 2300-0700 local time. (10/74)

WASHINGTON ARTCC: Enroute radar service, VFR advisory service and merging target service below 10,000 feet MSL available only to transponder equipped aircraft in Roanoke, Lynchburg, Charlottesville, Danville and Elkins. (2/78)

AREA ADVISORIES

FLORIDA

MIAMI: Balloon flights will be made to 1500 feet AGL sunrise-sunset in an area 5 miles north of the Miami VORTAC, about 6 miles south/southwest of the intersection of US highway and State highway 84. (3/78)

GEORGIA

ATLANTA TOWER SPECIAL NOTICE: Low altitude airway structure in proximity of the William B. Hartsfield Atlanta International Airport is aligned to provide bypass routes for traffic overflying Atlanta. To avoid Heavy Concentration of high performance and wide-bodied aircraft, pilots should file airways beyond 35 nautical miles from Atlanta VOR. Aircraft operating IFR below 15,000 MSL, via airways within 35 nautical miles of Atlanta VOR may expect altitude changes and/or rerouting between the hours 0830 and 2100 local time. (6/78)

MASSACHUSETTS

SPECIAL NOTICE: Weather warning signs installed airport ramp areas at number Cape Cod and bordering Island locations. Signs function with associated flashing lights during periods where IFR or other hazardous weather is current or forecast. Sign and light system operations at Chatham, Martha's Vineyard, Hyannis, New Bedford, Plymouth, and Nantucket during hours airport attended or tower open. (9/79)

BOURNE: Aircraft operating below 2000 ft and within 3 miles of Pave Paws radar site located in Restricted Area 4101 may experience momentary erratic operation of cockpit instruments or navigational equipment. Pilots are encouraged to submit reports of such occurrences to nearest FAA Air Traffic Facility. (5/79)

BOSTON: To avoid the concentration of aircraft arriving and departing Boston, pilots requesting IFR flight at and below altitudes 14,000 feet MSL should file for airways beyond 40 NM from Boston VORTAC between the hours of 0800-2100 local. Traffic to/ from Maine and Cape may file V167.

MINNESOTA

HIBBING: Extensive open pit mine blasting operations being conducted from 12 nautical miles southwest to 48 northeast of Hibbing. Possible debris to 4000 feet. Contact Hibbing FSS for blasting schedule. (5/76)

NEW MEXICO

FARMINGTON: Blasting daily 0900-1700 between the Farmington VOR 120 degree to the 330 degree radials beyond 10 DME miles. Caution should be exercised if operating below 500 feet AGL near drag lines or drilling rigs. (6/78)

ALBUQUERQUE ARTCC: VFR radar advisory service and merging target service available to transponder equipped aircraft above 10,000 feet msl from a point 75 miles south of El Paso, Texas, to the U. S. /Mexico border. (10/80)

NEW YORK

NIAGARA FALLS: Recommended VFR Flight Procedures in the "Niagara Scenic Falls" Area. (A) Due to the high concentration of Sightseeing Flights in the Niagara Falls Area and in the interest of Flight safety, the following procedures are recommended:

- (1) A right hand circuit pattern with north end right turn area, south of the railroad bridge across the Niagara Gorge—and southern right turn area near the town of Chippewa, (south shore of Niagara River).
- (2) On joining the right hand pattern, pilots should broadcast their intentions on frequency 122.9 MHz, giving their cruising altitude and point of entry: i.e., northbound or southbound, and monitor the frequency while in the pattern.
- (3) It is recommended that (a) helicopters operate in the pattern between 2000 and 2200 ft. MSL. (b) fixed wing aircraft operate in the pattern between 2500 and 3000 ft. MSL. (c) turbo prop/jet and aircraft with cruise speeds of 150 kts. +, operate in this pattern above 3200 ft. MSL.

Although these procedures are intended to segregate traffic, VFR rules of "See and Be Seen" and good airmanship practices will prevail.

(B) IMPORTANT NOTE: Obtain current altimeter setting prior to joining the pattern through either Niagara Falls tower frequency, or St. Catharines tower frequency. All Pilots are cautioned that the areas on both sides of the Niagara Gorge between "The Whirlpool" and "Horseshoe Falls" are extremely noise sensitive. Maintain at least 2200 ft. AGL over this area prior to joining the pattern. (3/80)

The provision of enroute primary radar services is not available in the Boston ARTCC Watertown NY area at 12,000 feet and below, Rockdale/Utica NY areas at 11,000 feet and below, Delancey NY area at 7,000 feet and below, and in the Syracuse/Georgetown NY areas at all altitudes. (7/80)

AREA ADVISORIES



OREGON

BIRD HAZARDS: Heavy concentration of migratory and wintering flocks of large waterfowl throughout central Oregon from the Washington to California borders annually November to May. Caution advised at all airports or while transiting area.

TEXAS

SAN ANTONIO: April to October large concentrations of bats are observed in the vicinity of Bracken Cave located 5.5 miles east of SAT VORTAC. Most activity is observed near sunset and sunrise at altitudes up to 10000 feet.

UTAH

BINGHAM CANYON: Unmarked cables and pole lines suspended across canyon and in vicinity of the open pit mine. (10/74)

BRIDAL VEIL FALLS: Unmarked cables and power lines suspended across the valley from the South Rim to the North Valley Floor. Three cables from the tram and 200 feet to 400 feet above the tram cables are two powerlines. None of these cables and powerlines are marked. (10/81)

WASHINGTON

COLUMBIA RIVER BASIN: Bird Hazard—Heavy concentration of migratory and wintering flocks of large waterfowl throughout the Columbia River Basin from the Canadian to Oregon borders annually November to May. Caution advised to all airports or while transiting area.

MOUNT ST. HELENS: Recommended VFR Flight Procedures in the vicinity of Mount St. Helens, Washington.

(A) The United States Geological Survey and the United States Forest Service conduct low level flights to and from monitor stations within 12 nautical miles of Mount St. Helens. Due to this activity, the volatility of the volcano and a high volume of sightseeing flights in the area, the following procedures are recommended in the interest of flying safety.

(1) Below 3000 feet AGL—VFR strongly not recommended.

(2) Above 3000 feet AGL—Fly a counterclockwise pattern, no closer than 3 miles to the volcano summit.

VFR rules of "see and be seen" and good airmanship practices will prevail. Approval to land can only be obtained through appropriate Federal or State authority. Any significant information will be broadcast on the transcribed weather broadcasts by the Seattle, Portland, and Walla Walla Flight Service Stations and available on the Portland and Seattle automatic terminal information service.

Marginal radar coverage limits Seattle Center's ability to provide radar flight following to aircraft in orbit of the volcano.

WYOMING

SHERIDAN: Coal mine blasting surface to 1000 feet AGL 27 nautical miles northeast of Sheridan. Blasting will continue indefinitely. (10/74)



AREA NAVIGATION ROUTES (RNAV)

Area navigation systems permit navigation via a selected course to a proficient point without having to fly directly toward or away from a navigational aid. Typical of such systems are doppler radar, inertial and course line computers.

Introduction of the area navigation capability into the National Airspace System provides a means of overcoming many of the constraints of the VOR system. Elimination of the requirement to fly along radials that lead directly to or from the ground station makes it possible to design routes and procedures that better facilitate the movement of traffic.

Guidelines for the implementation of area navigation within the National Airspace System were issued in the form of Advisory Circular 90-45A on 2 February 1975. Advisory Circular 90-45A contains standards and methods for obtaining approval for use of area navigation equipment in IFR operations. It also contains air traffic procedures applicable to approved area navigation equipment.

Since the VOR system forms the basis for the existing airway and air traffic control systems, area navigation route definitions and air traffic control clearances will be in terms of, and referenced to, VOR ground stations. However, latitude/longitude descriptions of fixes forming area navigation routes are provided to facilitate the use of airborne systems that are not dependent on VOR input signals.

Area navigation routes are numbered in a manner similar to VOR airways and jet routes. The suffix "R" identifies the route as an area navigation route. When filing an IFR flight plan containing an area navigation route, the route number may be filed in the same manner as a VOR airway number. The filed route should clearly

define the intended route during transition from the VOR structure to the area navigation structure.

Area navigation route numbering will be as follows:

(1) Series 700 (low) and 800, 900 (high) routes—Routes designated in Parts 71 and 75. Routes expected to be in frequent use by more than one user and published on appropriate U.S. Government Charts. MEAs will be published in FAR 95. (No series 700 routes currently designated.)

(2) Series 500 (low) and 600 (high) routes.—Routes published in the Graphic Notices and Supplemental Data. Routes planned for more than one user but their expected usage does not justify Government charting. MEA's when not published in FAR 95 and the Graphic Notices and Supplemental Data, will be provided by ATC.

(3) Series 300 (low) and 400 (high) routes—Routes established primarily for one user. Not carried on Government charts. MEAs will be periodically published in the listing of non-95 routes.

The routes contained herein are those of the 500 and 600 Series.

Each area navigation route listed is based on a centerline which extends between fixes, described by reference to VOR/DME, called waypoints, specified for that route. Each waypoint is listed by geographical name, followed by the VOR/DME fix description in the format: VOR STATION RADIAL/DME MILEAGE (example POM 033/010). Also included are the track to be flown (Mag track), the VOR changeover point (COP, with "MP" indicating Midpoint) the distance (DIST) between waypoints, and the latitude/longitude description.



SPECIAL OPERATIONS**CIVIL FLIGHT TEST AREAS**

The graphics on the following pages depict areas that have been designated as flight test areas for civil aircraft manufacturers. These flight tests shall be conducted under the following conditions.

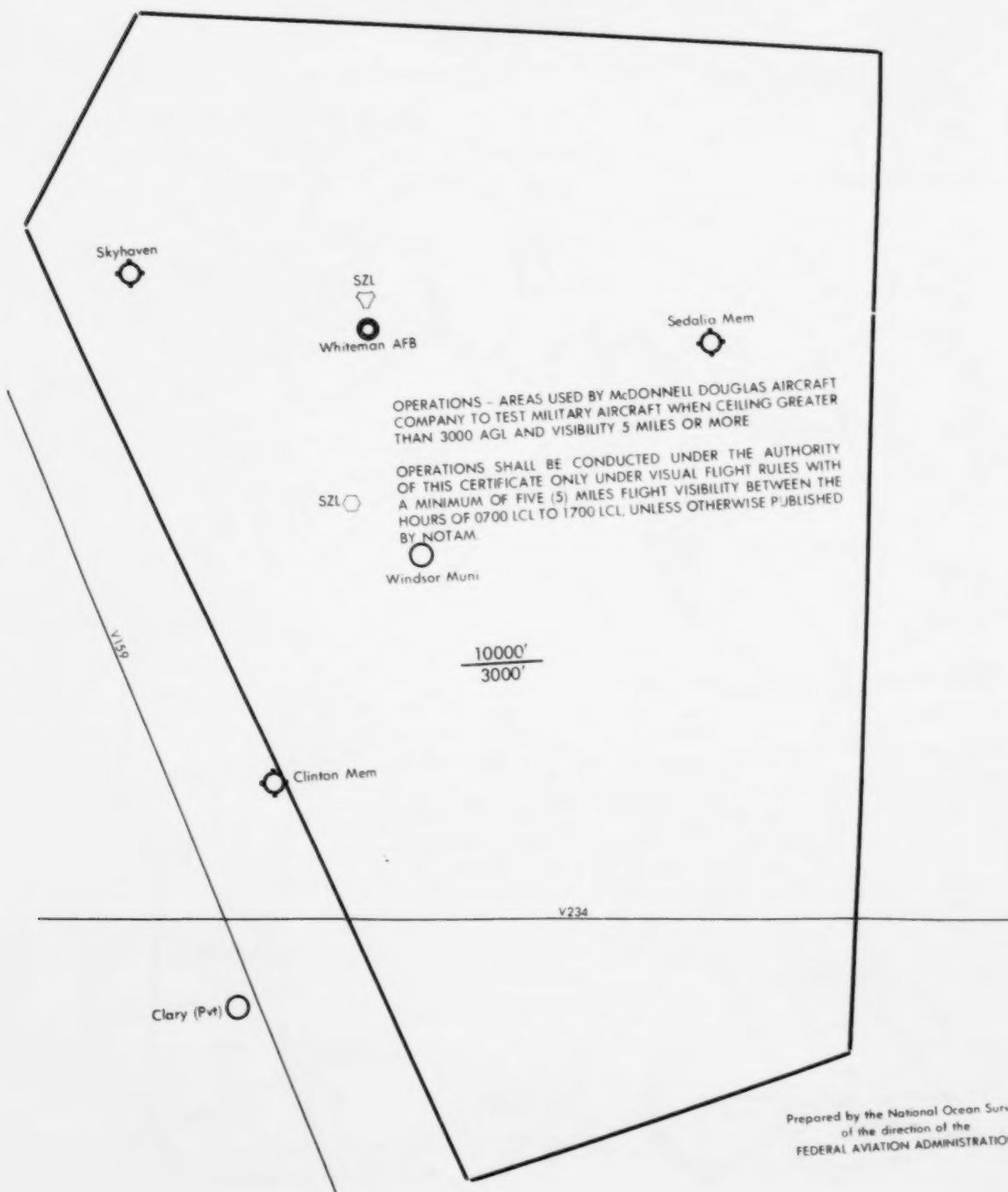
Operations—Conducted by military jet type aircraft at indicated air-speeds above 250 knots when ceiling greater than 3,000 feet AGL and visibility five (5) miles or more.

Altitudes—10,000 feet to surface.

Hours of Operations—Check graphics or Flight Service Station for hours of operation.

MCDONNELL AIRCRAFT COMPANY MAC WEST

V12

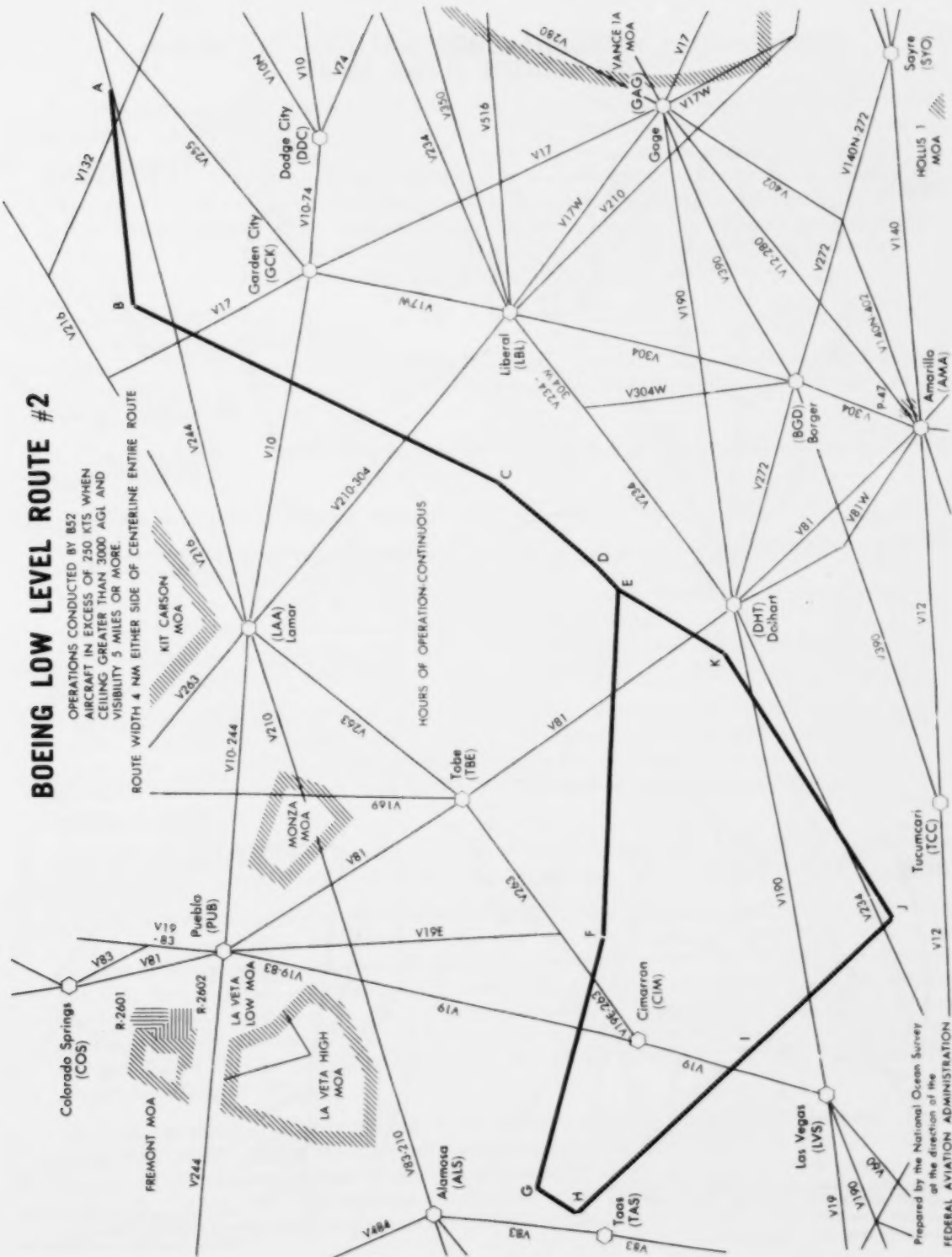


26 NOV 1981

BOEING LOW LEVEL ROUTE #2

OPERATIONS CONDUCTED BY B52
AIRCRAFT IN EXCESS OF 250 KTS WHEN
CEILING GREATER THAN 3000 AGL AND
VISIBILITY 5 MILES OR MORE.

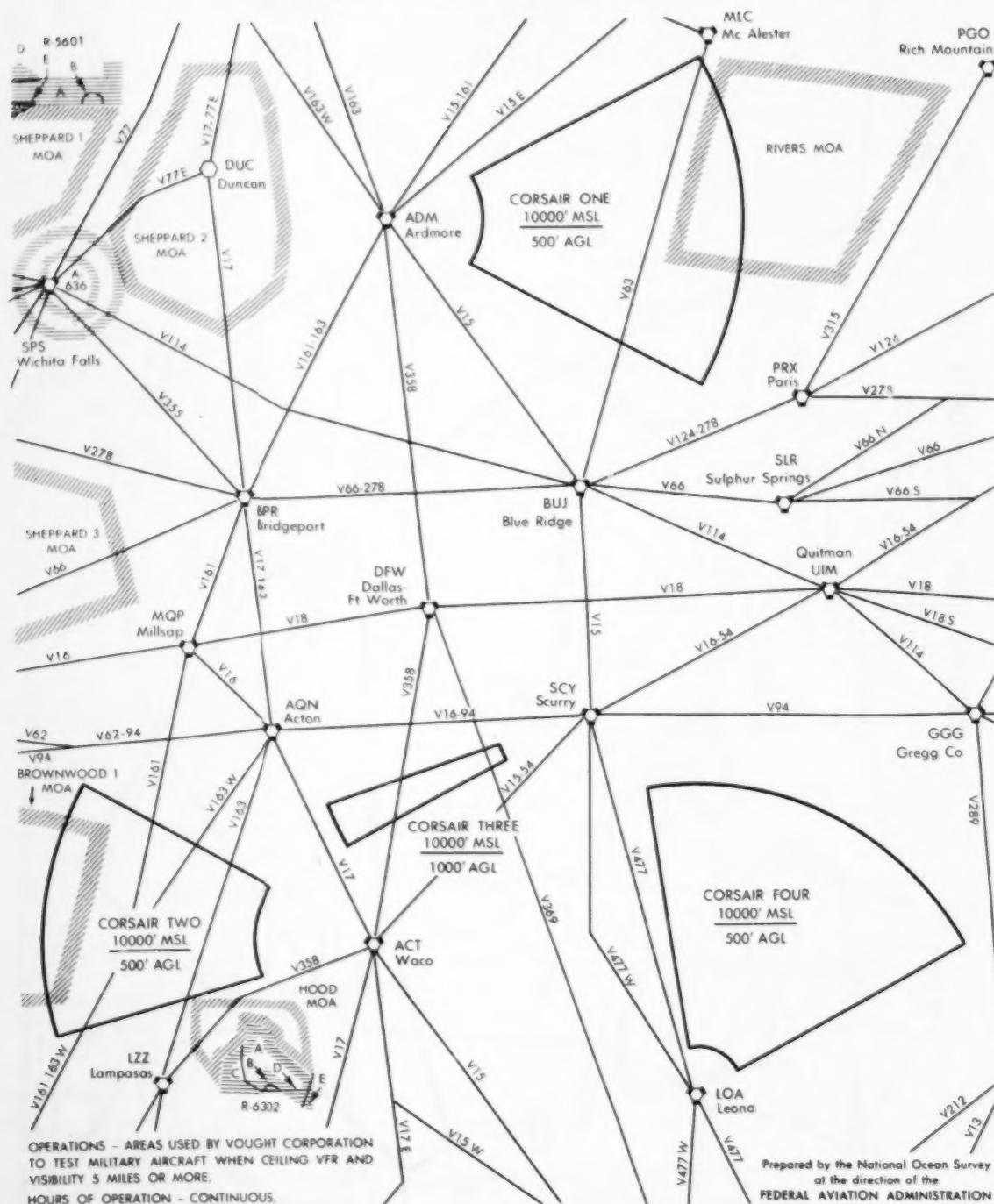
ROUTE WIDTH 4 NMA EITHER SIDE OF CENTERLINE ENTIRE ROUTE



HOURS OF OPERATION CONTINUOUS

Prepared by the National Ocean Survey
at the direction of the
FEDERAL AVIATION ADMINISTRATION

VOUGHT CORPORATION
LOW ALTITUDE FLYING AREAS



NORTH ATLANTIC MINIMUM NAVIGATION REQUIREMENTS

The concept of minimum Navigation Performance Specifications (MNPS) has been adopted on a world-wide basis by the International Civil Aviation Organization (ICAO). MNPS has the objective of ensuring both safe separation of aircraft and also to enable operators to derive maximum economic benefit from the improvement in accuracy of navigation equipment which has been demonstrated in recent years. An implicit condition of MNPS is that all operators must maintain the specified operating standards and be aware of the inherent obligations of the MNPS requirements. The MNPS concept will be implemented on a regional basis. Certain areas of the North Atlantic (NAT) region have introduced the MNPS concept. These areas are known as NAT MNPS airspace and include the following defined airspace boundaries:

- (a) between FL275 and FL400;
- (b) between latitudes 27°N and 67°N;
- (c) in the East – the Eastern boundaries of CTAs Santa Maria Oceanic, Shanwick Oceanic and Reykjavik;
- (d) in the West – the Western boundaries of CTAs Reykjavik and Gander Oceanic and New York Oceanic East of longitude 60°W.

Aircraft used to conduct flights within the volume of airspace specified shall have navigation performance capability such that:

- (a) the standard deviation of lateral track errors shall be less than 6.3 NM (11.7 Km);

Note: As a considerable simplification the above can be interpreted as a need for aircraft to stay within 12.6 NM (23.4 Km) of track for about 95% of the time.

- (b) the proportion of the total flight time spent by aircraft 30 NM (55.6 Km) or more off the cleared track shall be less than 5.3×10^{-4} (i.e., less than 1 hour in about 2000 flight hours).

- (c) the proportion of the total flight time spent by aircraft between 50 and 70 NM (92.6 and 129.6 Km) off the cleared track shall be less than 13×10^{-4} (i.e., less than 1 hour in about 8000 flight hours).

Such navigation performance capability shall be verified by the State of registry or the State of the aircraft operator as appropriate. Guidance material of use to those involved in the initial achievement and continued maintenance of the navigation capability set forth above has been issued by ICAO under the title "Guidance Material related to Air Navigation in the NAT Region" and will be supplemented and updated as required and as new material becomes available.

Flights entering MNPS airspace during any portion of their flight must enter the letter "X" after the letter "S" in item 10 of the ICAO flight plan to indicate that the flight has been certified as complying with MNPS.

Aircraft incapable of meeting MNPS in MNPS airspace will be given special consideration only in a very limited number of justified cases. Such consideration will require advance coordination between the requesting operator and the appropriate ATC authorities. The decision as to whether to allow such operations and, if so, the best method of operation will be made by the ATC authorities concerned with that airspace. The decision will be based upon the nature of the operation, the navigation capability of the aircraft, and the amount of air traffic forecast for the proposed time of operation. Final routing and/or handling or any such approved special arrangements will be in a manner that will not interfere with or impose a burden upon aircraft complying with MNPS.

The FAA has published Advisory Circular 91-49 offering a means of obtaining authorization to operate within NAT/MNPS airspace for operations conducted under FAR Part 91 and FAR Part 135. Advisory Circular 120-33 contains guidance for acquiring authorization to operate in NAT/MNPS airspace under FAR's 121, 123 and 135.2. Civil operators contemplating use of Loran C in MNPS airspace are advised to follow the MNPS certification process outlined in the appropriate advisory circular.

A. MONITORING OF NAVIGATION ACCURACIES

1. The data from which MNPS was calculated was derived from previous routine and special data collections involving radar observations and monitoring of equipment performance. In order to ensure that the MNPS are being met it is necessary to monitor the tracking accuracy of aircraft using the ATC radars which cover the exits from the oceanic airspace. The frequency of occurrence of the larger track deviations will be used as a measure of compliance with the second and third parameters of the specification. In cases of individual large errors, the pilot of the aircraft concerned will normally be notified by the ATC unit observing the error. The subsequent investigation may be carried out by the operator and its State of Registry after notification by the authority providing ATC service. If there is a serious increase in the number of large errors, it may become necessary to increase separation standards until remedial action has been determined. Alternatively if, rapid corrective action cannot be achieved, it may be necessary for the State of Registry or the State of the aircraft operator to temporarily exclude offending types of aircraft, or operators, from the "MNPS airspace."

2. An operator with MNPS approval who experiences a partial loss of navigation capability prior to entry in MNPS airspace should consider the following routes:

- (a) STN/BEN-60N 10W-61N 1234W-LIMA-KF
- (b) BEL-57N 10W-60N 15W-61N 1630W-MIKE-KF
- (c) KF-XRAY-KK-SF-FB
- (d) KF-UNIFORM-63N 30W-61N 40W-OZN
- (e) OZN-59N 50W-PRAWN-KL
- (f) OZN-59N 50W-PORGY-HO
- (g) OZN-58N 50W-LOACH-YR

3. Operations on the above routes in MNPS airspace are subject to the following conditions:

- (a) A revised flight plan is filed with ATC, and
- (b) An appropriate ATC clearance is obtained.

(Note: A revised oceanic clearance will be issued only after coordination between all Oceanic Area Control centers concerned.)

- (c) Sufficient navigation capability remains to meet the MNPS (i.e., redundancy may be lacking).
- (d) The aircraft concerned may have to accept a lower than optimum flight level during peak traffic hours if the organized track structure extends to the northern part of the NAT.
- (e) Nothing in these instructions override any redundancy requirements placed upon an operator by any Operations Specifications or FAR 121, 123, or 135.2, as appropriate.

B. ROUTES BETWEEN ICELAND AND NORTHERN EUROPE:

1. After a review of the navigation facilities available between Iceland and Northern Europe it has been agreed upon by the ICAO members that aircraft equipped with normal airways navigation equipment should be capable of meeting the MNPS when operating over certain routes between Iceland and Northern Europe. The routes will be designated G3 and G11 within and outside MNPS airspace.

- G3 will be established as a route between Bergen via Myggenes and Ingo to Keflavik.
- G11 will be established between Sumburgh via Akraberg to Myggenes.

2. Operation on certain routes between North Eastern Canada and Ireland or Northern United Kingdom via Iceland:

- (a) It is anticipated that a continued requirement may exist for selected routes between N.E. Canada and Iceland and between Iceland and points in Ireland or the Northern U.K. which could be used by aircraft not

normally used in N. Atlantic operations or by aircraft on delivery. The routes listed in paragraph A-2 above should be used for such operations. Aircraft operating along these routes in MNPS airspace which are equipped with normal airway navigation equipment (VOR/DME, ADF) and at least one fully operational set of the following long range navigation equipment:

- doppler with computer
- INS
- OMEGA
- Loran C

are considered capable of meeting MNPS while operating along these routes.

(b) The above-listed long range navigation equipment need not be permanent aircraft equipment.

C. ROUTES BETWEEN SPECIFIC POINTS IN PORTUGUESE TERRITORY:

1. Aircraft that are equipped with normal airway navigation equipment (VOR/DME, ADF) and at least one fully operational set of the following long range navigation equipment:

- doppler with computer
- INS
- OMEGA

are considered capable of meeting MNPS while operating along the following routes:

- (a) PST-35N 20W-FOXTROT TWO-VSM
- (b) CP-3820N 15W-38N 20W-ECHO/DELTA-VSM/MGL
- (c) CP-3853N 15W-39N 20W-BRAVO-LM

NORTH ATLANTIC STANDARDIZED AIR/GROUND MESSAGES

1. General

- 1.1 In order to make an evaluation it is proposed that within the North Atlantic (NAT) Region all ATS Air/Ground messages should be categorized under one of the following headings:

- (a) Position report
- (b) Request Clearance
- (c) Revised estimate
- (d) Miscellaneous air/ground message

The purpose of the evaluation is to determine whether pilot/controller response times can be improved.

- 1.2 In order to enable the ground stations to process messages in the shortest possible time, it is requested that pilots should observe the following rules:

- 1) use the correct type of message applicable to the data transmitted;
- 2) state the message type on the contact call to the ground station or at the start of the message (except if it is a miscellaneous message);
- 3) adhere strictly to the sequence of information for the type of message; and
- 4) all times on each of the messages should be expressed in hours and minutes.

2. Period of evaluation and scope of application

- 2.1 Operational evaluation using the new ATS message types will commence at 0001 GMT on 22 March 1979. During the initial period of seven months, data will be collected, analysed and further action taken as necessary. The procedures detailed for the transmission of air/ground messages will apply to transatlantic aircraft operating within or through the Gander, New York, Reykjavik, Santa Maria and Shanwick CTAs whether using HF or G/P VHF.

- 2.2 It will especially assist the communicators operating the Clearance Delivery Frequencies at Shanwick if westbound oceanic clearance requests are also transmitted in the format and data content specified in para 3.1.2 during the evaluation period.

3. Description of ATS Message Types

- 3.1 It should be appreciated that messages that have no ATS connection, e.g. SELCAL checks, form no part of this evaluation. For the purpose of the evaluation aircraft should transmit air/ground messages using standard RTF phraseology in accordance with the following:

3.1.1 POSITION

To be used for routine position reports.

CONTENT OF POSITION REPORT MESSAGE AND DATA SEQUENCE

- (a) "POSITION"
- (b) Flight identification
- (c) Present position
- (d) Time over present position (hours and minutes)
- (e) Present flight level
- (f) Next position on assigned route
- (g) Estimate for next position (hours and minutes)
- (h) Any further information, e.g. AIREP data or Company message

3.1.2 REQUEST CLEARANCE

- 1) To be used in conjunction with a routine position report to obtain a change of Mach No., flight level or route and to obtain *Westbound* Oceanic clearance prior to entering Reykjavik, Santa Maria or Shanwick CTAs.

CONTENT OF REQUEST CLEARANCE MESSAGE AND DATA SEQUENCE

- (a) "REQUEST CLEARANCE"
- (b) Flight identification
- (c) Present or last reported position
- (d) Time over present or last reported position (hours and minutes)
- (e) Present flight level
- (f) Next position on assigned route or oceanic entry point
- (g) Estimate for next position or oceanic entry point (hours and minutes)
- (h) Requested Mach No (if applicable)
- (i) Requested flight level (if applicable)
- (j) Requested route (if applicable)
- (k) Further information or clarifying remarks

NOTE: the message implies that when a reclearance requested in respect of any single item in (h), (i) or (j) or any combination of these items it is to take effect as soon as possible unless otherwise stated in (k).

- 2) To be used to request a change of flight level or Mach No. when a position report message is not appropriate.

CONTENT OF REQUEST CLEARANCE MESSAGE AND DATA SEQUENCE

- (a) "REQUEST CLEARANCE"
- (b) Flight identification
- (c) Requested flight level and/or Mach No.
- (d) Further information of clarifying remarks

3.1.3 REVISED ESTIMATE

To be used to update estimate for next position.

CONTENT OF REVISED ESTIMATE MESSAGE AND DATA SEQUENCES

- (a) "REVISED ESTIMATE"
- (b) Flight identification
- (c) Next position on assigned route
- (d) Revised estimate for next position (hours and minutes)
- (e) Any further information

3.1.4 MISCELLANEOUS

To be used to pass information or make a request in plain language that does not conform with the three other formats. No message type designator is required to be stated by the pilot since message type will be inserted by the ground station.

CONTENT OF MISCELLANEOUS MESSAGE AND DATA SEQUENCE

- (a) Flight identification
- (b) General information or request in plain language—form free.

NORTH AMERICAN ROUTES FOR NORTH ATLANTIC TRAFFIC (NAR)

GENERAL

(a) The NAR system has been developed to achieve the following objectives: (1) to organize the fluctuating and reversing traffic flows in the most efficient possible manner, consistent with the needs of aircraft operators and air traffic services; (2) to expedite flight planning; (3) to reduce the complexity of route clearances and thereby minimize the confusion and error potential inherent in lengthy transmissions and readbacks; and (4) to minimize the time spent by pilots and controllers in the route clearance delivery function.

(b) The NAR system comprises a series of pre-planned routes over existing airway/route systems from/to the following coastal fixes serving the North Atlantic traffic. Most of the NAR routes are divided into two portions.

(1) Common Portion - That portion of the route between the coastal fix and a specified Inland Navigation Facility. Example - Route NA108 common portion is "St. John's (Nfld) HL575 J575 Boston."

(2) Non-Common Portion - That portion of the route between the specified Inland Navigation Facility and the system airport being used by the flight. Example - Route NA108 non-common portion may be "Boston Norwich Saybrook Star Kennedy" or it may be "Boston Putnam J581 Kennedy Kennedy 263 Radial Modena 056 Radial Modena V474 V143S Westminster Frederick 082 Radial Frederick Dulles," depending on whether the system airport being used by the flight is Kennedy or Dulles.

(c) These routes are numbered and prefixed by the abbreviation "NA." Odd route numbers have eastbound application only and even route numbers have westbound application only.

(d) Aircraft are considered to be within the NAR system when they join the system at an identified coastal fix; they join the system on departure from one of the identified airports; or when they join the system at an identified Inland Navigation Facility.

(e) Since a primary function of the NAR system is to complement the North Atlantic Organized Track System (NAT/OTS), a limited number of NAR routes appropriate for the coastal fixes serving the OTS and domestic traffic organization are included in the daily NAT/OTS messages published by the Gander and Shanwick OAC's.

(f) All aircraft that enter/exit the North Atlantic via the identified coastal fixes should use the NAR system if their domestic route requirements are compatible with the system. However, when necessary, an operator may flight plan a domestic route other than the one included in the current NAT/OTS message. Similarly, due to traffic conditions, Air Traffic Control may clear an aircraft via a route other than that flight planned.

FLIGHT PLANNING

(a) Route Description

(1) When the route of flight within the NAR system can be described by a single NAR designator, the route should be indicated on the flight plan using the appropriate designator.

(2) In all other cases, a full description of the route is required.

(3) Aircraft flight planning into or from either Goose or Gander Airports, Canada, may file the NAR designator as the route of flight.

ROUTE CLEARANCES

(a) For aircraft operating within the NAR system, the ATC clearance and pilot readback will be as follows:

(flight identification) IS CLEARED TO THE (destination) AIRPORT VIA NORTH AMERICAN ROUTE (number).

(b) For aircraft operating within the NAR system either to or from an airport not included in a non-common route, the ATC clearance and pilot readback may be as follows:

ATC CLEARS (flight identification) TO (overseas destination) VIA J545 HL545 LONDON HL586 STIRLING HL555 BAIE COMEAU NORTH AMERICAN ROUTE 251 GOOSE FLIGHT PLANNED ROUTE...

(flight identification) IS CLEARED TO THE CLEVELAND AIRPORT VIA NORTH AMERICAN ROUTE 246 CHARLEVOIX HL555 QUEBEC HL546 KLEINBURG HL558 LONDON HL545 J545 CLEVELAND...

(c) Westbound aircraft operating within the North Atlantic Organized Track System and destined for one of the selected North American Terminals served by the NAR System, having experienced communications failure prior to receipt of domestic route clearance should consider as its cleared route of flight the NAR associated with its cleared oceanic track as published in the current NAT/OTS message.

(d) Aircraft not operating within the NAR system will be cleared via a fully detailed route.

DOCUMENTATION

(a) It is expected that the following NAR documentation will be carried on the flight deck of each aircraft operating within the NAR system: (1) a description of the current NAR and (2) the information contained in the current NAT/OTS message.

(b) The official NAR route descriptions are contained in both Canadian Ministry of Transport (MOT) and U.S. Federal Aviation Administration (FAA) publications. The official FAA listing appears in both the INTERNATIONAL FLIGHT INFORMATION MANUAL, issued annually and amended quarterly, and in the publication GRAPHIC NOTICES AND SUPPLEMENTAL DATA (U.S. AIP section RAC-9), issued quarterly. Both publications contain identical listings. Changes to the NAR routes are advertised in the bi-weekly publication INTERNATIONAL NOTICES TO AIRMEN and the bi-weekly publication NOTICES TO AIRMEN (CLASS II).

(c) The following listing divides the NAR Route descriptions into two sections according to the direction of flight (Eastbound or Westbound). Each section is subdivided according to the route portion (common or non-common). The common portion describes the NAR route between the Coastal Fix and the Inland Navigational Facility. The non-common portion describes the route between the NAR route system airport being used and the Inland Navigational Facility.

SECTION I - NAR EASTBOUND ROUTES

(A) COMMON PORTION (EASTBOUND)

NAR Designator	Inland Navigation Facility	Route Description	Coastal Fix
NA1	Winnipeg	R56	Slaton
NA3	Nantucket	J62	Poggo
NA21	Nantucket	Control 1146 Whale Bluse	Sable Island
NA23	Watertown	J595 HL595 Saint John (N.B.) HL506	Sable Island
NA25	Beauce	HL509 J509 Patta Millinocket J506 FL506	Sable Island
NA27	Nantucket	Control 1146 Whale Bluse Sable Island	Bancs
NA29	Watertown	J595 HL595 Saint John (N.B.) HL506 Sable Island	Bancs
NA31	Beauce	HL509 J509 Patta Millinocket J506 HL506 Sable Island	Bancs
NA41	Nantucket	J585 HL585 Yarmouth HL575 Halifax Canso	Color
NA43	Watertown	J595 HL595 Saint John (N.B.) HL506 Halifax Canso	Color
NA45	Beauce	HL509 J509 Patta Millinocket J506 HL506 Halifax Canso	Color
NA47	Canal	J575 HL575 Halifax Canso	Color
NA61	Watertown	J595 HL595 Saint John (N.B.) HL573 Charlottetown HL509 HL509 J509 HL509	Sydney Sydney
NA63	Beauce	J585 HL585 Yarmouth HL575	Sydney
NA65	Nantucket	J575 HL575	Sydney
NA67	Canal	J585 HL585 Yarmouth HL575	St. John's (Nfld)
NA81	Nantucket	J595 HL595 Saint John (N.B.) HL573 Charlottetown HL509 Sydney HL575	St. John's (Nfld)
NA83	Watertown	J595 HL595 St. John (N.B.) HL573	St. John's (Nfld)
NA85	Watertown	HL509 J509 HL509 Sydney HL575 HL509 J509 HL509 Moncton HL500	St. John's (Nfld)
NA87	Beauce	Channel Head HL573	St. John's (Nfld)
NA89	Beauce	J575 HL575	St. John's (Nfld)
NA91	Canal		

NAR Designator	Inland Navigation Facility	Route Description	Coastal Fix
NA101	Nantucket	J585 HL585 Yarmouth	
NA103	Kennebunk	HL575 Sydney HL577 Ramea	Vysta
NA105	Hyannis	J573 HL573 Ramea	Vysta
NA107	Watertown	J79 Seac J573 HL573 Ramea	Vysta
		J595, HL595 Saint John (N.B.)	
		HL573 Ramea	Vysta
NA109	Beauce	HL509 J509 HL509 Moncton	
		HL500 Channel Head HL573 Ramea	Vysta
NA111	Canal	J575 HL575 Sydney HL577 Ramea	Vysta
NA121	Nantucket	J585 HL585 Yarmouth HL575	
		Sydney HL577	Gander
NA123	Kennebunk	J573 HL573 Channel Head HL500	Gander
NA125	Hyannis	J79 Seac J573 HL573	
		Channel Head HL500	Gander
NA127	Watertown	J595 HL595 Saint John (N.B.)	
		HL573 Channel Head HL500	Gander
NA129	Beauce	HL509 J509 HL509 Moncton HL500	Gander
NA131	Canal	J575 HL575 Sydney HL577	Gander
NA141	Kennebunk	J581 HL581 Stephenville HL579	Springdale
NA143	Kennebunk	J573 HL573 Channel Head	Springdale
NA145	Hyannis	J79 Bangor J581 HL581	
		Stephenville HL579	Springdale
NA147	Hyannis	J79 Seac J573 HL573	
		Channel Head	Springdale
NA151	Beauce	HL509 J509 HL509 Cheps	
		HL581 Stephenville HL579	Springdale
NA161	Kennebunk	J581 HL581 Conay	Dotty
NA163	Hyannis	J79 Bangor J581 HL581 Conay	Dotty
NA165	Beauce	HL509 J509 HL509 Cheps	
		HL581 Conay	Dotty
NA167	Watertown	J595 Bangor J581 HL581 Conay	Dotty
NA181	Cambridge	J49 Friar J55 Presque Isle	
		J564 HL564 Charlo HL549	Natashquan
NA183	Kennebunk	J55 Presque Isle J564 HL564	
		Charlo HL549	Natashquan
NA185	Hyannis	J79 Bangor J29 Presque Isle	
		J564 HL564 Charlo HL549	Natashquan
NA187	Riviere du Loup	HL560 Mont Joli HL553	Natashquan
NA201	Kennebunk	J581 HL581 Conay HL571	St. Anthony
NA203	Hyannis	J79 Bangor J581 HL581	
		Conay HL571	St. Anthony
NA207	Cambridge	J49 Friar J55 Presque Isle	
		J564 HL564 Charlo HL589	
		Heath Point HL571	St. Anthony
NA209	Beauce	HL509 J509 HL509 Cheps	
		HL581 Conay HL571	St. Anthony
NA211	Beauce	HL564 J564 HL564 Charlo HL589	
		Heath Point HL571	St. Anthony
NA213	Riviere du Loup	HL589 Heath Point HL571	St. Anthony
NA215	Riviere du Loup	HL560 Mont Joli HL553	St. Anthony
NA221	Kennebunk	J55 Presque Isle J564 HL564	Port Menier
NA223	Hyannis	J79 Bangor J29 Presque Isle	
		J564 HL564	Port Menier
NA225	Cambridge	J49 Friar J55 Presque Isle	
		J564 HL564	Port Menier

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NAR Designator	Inland Navigation Facility	Route Description	Coastal Fix
NA227	Riviere du Loup	HL560 Mont Joli HL553	Port Menier
NA241	Kennebunk	J55 Presque Isle J582 HL582 Sept Iles HL560	Goose Goose
NA243	Kennebunk	J55 Presque Isle Lake Eon HL560	Goose
NA245	Hyannis	J79 Bangor J29 Presque Isle J582 HL582 Sept Iles HL560	Goose
NA247	Hyannis	J79 Bangor J29 Presque Isle Lake Eon HL560	Goose
NA249	Riviere du Loup	HL560	Goose
NA251	Baie Comeau	HL555 Lake Eon HL560	Goose
NA253	Cambridge	Sherbrook HL563 Riviere du Loup HL560	Goose Waco
NA261	Kennebunk	J55 Presque Isle J582 HL582	Waco
NA263	Hyannis	J79 Bangor J29 Presque Isle J582 HL582	Waco
NA265	Cambridge	Sherbrooke HL563 Baie Comeau HL586	Waco
NA267	Baie Comeau	HL586	Waco
NA281	Kennebunk	J55 Presque Isle J582 HL582	Hopedale
NA283	Hyannis	J79 Bangor J29 Presque Isle J582 HL582	Hopedale
NA285	Cambridge	Sherbrooke HL563	Hopedale
NA287	Baie Comeau	HL563	Hopedale
NA289	Peck	J551 HL551	Hopedale

(B) NON-COMMON PORTION (EASTBOUND)

VIA BEAUCE

From	Non-Common Portions to Beauce
Montreal/Mirabel	V363 HL565
Montreal/Dorval	V352 HL509
Ottawa	V300 Valie Cote St. Luc
Toronto	V98 Stirling HL555 Montreal HL509
Detroit	Aylmer Toronto Stirling HL555 Montreal HL509
Chicago	London HL586 Stirling HL555 Montreal HL509

VIA BAIE COMEAU

From	Non-Common Portions to Baie Comeau
Montreal/Mirabel	V318 HL553 Charlevoix HL555
Montreal/Dorval	V352 V98 HL586
Ottawa	V360 V318 HL553 Charlevoix HL555
Toronto	V98 Stirling HL555
Detroit	Aylmer Toronto Stirling HL555
Chicago	London HL586 Stirling HL555

VIA CAMBRIDGE

There is no non-common portion to Cambridge.

VIA CANAL

There is no non-common portion to Canal.

VIA HYANNIS

There is no non-common portion to Hyannis.

VIA KENNEBUNK

There is no non-common portion to Kennebunk.

VIA NANTUCKET

From	Non-Common Portions to Nantucket
Kennedy	Sardi 7 Departure Direct

VIA PECK

From	Non-Common Portions to Peck
Chicago	Direct

VIA RIVIERE DU LOUP

From	Non-Common Portions to Riviere du Loup
Montreal/Mirabel	V318 HL553 Charlevoix
Montreal/Dorval	V352 V98 HL586 Quebec HL560
Toronto	V98 Stirling HL555 Quebec HL560
Ottawa	V360 V318 HL553 Charlevoix
Detroit	Aylmer Toronto Stirling HL555 Quebec HL560
Chicago	London HL586 Stirling HL555 Quebec HL560

VIA WATERTOWN

From	Non-Common Portions to Watertown
Chicago	London HL595 J595
Detroit	Aylmer Toronto
Toronto	V98 281 Radial Watertown

VIA WINNY

From	Non-Common Portions to Winny
Kennedy	Winny 2 Departure Direct

SECTION 2 - NAR WESTBOUND ROUTES

(A) COMMON PORTION (WESTBOUND)

NAR Designator	Coastal Fix	Route Description	Inland Navigation Facility
NA2	Slatn	J97	Nantucket
NA4	Poggo	Direct	Hyannis
NA20	Sable Island	Bluse Whale Control 1146	Herin
NA22	Sable Island	HL506 Halifax HL578 Parck HL500 J500 HL500	Sherbrooke
NA24	Bancs	Sable Island Bluse Whale Control 1146	Herin
NA26	Bancs	Sable Island HL506 Halifax HL578 Konig HL500 J500 HL500	Sherbrooke
NA40	Color	Canso Halifax HL575 J575	Boston
NA42	Color	Canso Halifax HL575	Yarmouth
NA44	Color	Canso Halifax HL578 Parck HL500 J500 HL500	Sherbrooke
NA60	Sydney	HL575	Yarmouth
NA62	Sydney	HL575 J575	Boston
NA464	Sydney	HL509 Moncton HL500 J500 HL500	Sherbrooke
NA80	St. John's (Nfld.)	HL575	Yarmouth
NA82	St. John's (Nfld.)	HL575 J575	Boston
NA84	St. John's (Nfld.)	HL575 Sydney HL509 Moncton HL500 J500 HL500	Sherbrook
NA100	Vysta	Ramea HL577 Sydney HL575	Yarmouth
NA102	Vysta	Ramea HL577 Sydney HL575 J575	Boston
NA104	Vysta	Ramea HL573 J573	Kennebunk
NA106	Vysta	Ramea HL573 Channel Head HL500 J500 HL500	Sherbrooke
NA120	Gander	HL577 Sydney HL575	Yarmouth
NA122	Gander	HL577 Sydney HL575 J575	Boston
NA124	Gander	HL500 Channel Head HL573 J573	Kennebunk
NA126	Gander	HL500 J500 HL500	Sherbrooke
NA140	Springdale	HL579 Stephenville HL581 J581	Kennebunk
NA142	Springdale	HL579 Stephenville HL581 Fredericton HL500 J500 HL500	Sherbrooke
NA160	Dotty	Conay HL581 J581	Kennebunk
NA162	Dotty	Conay HL581 Fredericton HL500 J500 HL500	Sherbrooke
NA180	Natashquan	HL549 Charlo HL564 J564 Presque Isle J55	Kennebunk
NA182	Natashquan	HL549 Charlo HL589	Riviere du Loup
NA184	Natashquan	HL553	Charlevoix
NA200	St. Anthony	HL571 Conay HL581 J581	Kennebunk
NA202	St. Anthony	HL571 Heath Point HL589 Charlo HL564 J564 Presque Isle J55	Kennebunk
NA204	St. Anthony	HL553	Charlevoix
NA206	St. Anthony	HL571 Conay HL581 Fredericton HL500 J500 HL500	Sherbrooke
NA208	St. Anthony	HL571 Heath Point HL589	Riviere du Loup
NA210	St. Anthony	HL553 Mont Joli HL560	Riviere du Loup
NA220	Port Menier	HL564 J564 Presque Isle J55	Kennebunk
NA222	Port Menier	HL553 Mont Joli HL560	Riviere du Loup
NA224	Port Menier	HL553	Charlevoix
NA240	Goose	HL560 Lake Eon Presque Isle J55	Kennebunk

NAR Designator	Coastal Fix	Route Description	Inland Navigation Facility
NA242	Goose	HL560 Sept Iles HL582 J582 Presque Isle J55	Kennebunk
NA244	Goose	HL560 Riviere du Loup HL563 J563	Albany
NA246	Goose	HL560 Sept Iles HL555	Charlevoix
NA260	Waco	HL582 J582 Presque Isle J55	Kennebunk
NA262	Waco	HL586 Baie Comeau HL563 J563	Albany
NA264	Waco	HL586	Charlevoix
NA280	Hopedale	HL551 Wabush HL583 Sept Iles HL582 J582 Presque Isle J55	Kennebunk
NA282	Hopedale	HL551 Wabush HL561 J561 Presque Isle J55	Kennebunk
NA284	Hopedale	HL551 Wabush HL561 Baie Comeau HL563 J563	Albany
NA286	Hopedale	HL551 Chibougamau HL570 J570	Albany
NA288	Hopedale	HL551 Wabush HL561 Baie Comeau HL555	Charlevoix
NA290	Hopedale	HL551 J551 Peck J94 Pullman V84 Pappi	Chicago Midland
NA292	Hopedale	HL551 Chibougamau HL545	Montreal/Mirabel
NA294	Hopedale	HL551 Chibougamau HL570	/Dorval
NA302	Schefferville	HL561 J561 Presque Isle J55	Kennebunk
NA304	Schefferville	HL561 Baie Comeau HL563 J563	Albany
NA306	Schefferville	HL548 Nitchequon HL545 Chibougamau HL570 J570	Albany
NA308	Schefferville	HL561 Wabush HL583 Sept Iles HL582 J582 Presque Isle J55	Kennebunk
NA310	Schefferville	HL548 Nitchequon HL545	Midland
NA312	Schefferville	HL561 Baie Comeau HL555	Charlevoix
NA314	Schefferville	HL548 J548 Pullman V84 Pappi	Chicago
NA316	Schefferville	HL548 Nitchequon HL545 Chibougamau HL570	Montreal/Mirabel /Dorval

(B) NON-COMMON PORTION (WESTBOUND)

VIA ALBANY

Non-Common Portions from Albany

Albany	Kingston Kingston Arrival	Kennedy
Albany	Pawling Calverton Calverton 193 Radial J121 Coyle 100 Radial Coyle	McGuire
Albany	J49 Hancock V153 Lake Henry V149 Mazie	Philadelphia
Albany	Pawling Calverton Calverton 193 Radial J121 Sea Isle	Dover
Albany	J37 Kennedy Kennedy 264 Radial Modena 056 Radial Modena V3 Taylo V93 Jaret	Baltimore
Albany	J37 Kennedy Kennedy 264 Radial Modena 056 Radial Modena V378 Ensue	Andrews
Albany	J37 Kennedy Kennedy 264 Radial Modena 056 Radial Modena V474 V143 Scoby Armel	Dulles

VIA BOSTON

Non-Common Portions from Boston

Boston	Norwich Saybrook 3 Arrival	Kennedy
Boston	J55 Providence J121 Coyle 100	McGuire
	Radial Coyle	
Boston	J55 Providence J121 Coyle	Philadelphia
	100 Radial V312 Woodstown	Dover
Boston	J55 Providence J121 Sea Isle	
Boston	Putnam J581 Kennedy Kennedy 264	
	Radial Modena 056 Radial Modena V3	Baltimore
	Taylor V93 Jaret	
Boston	Putnam J581 Kennedy Kennedy 264	
	Radial Modena 056 Radial Modena	Andrews
	V378 Ensue	
Boston	Putnam J581 Kennedy Kennedy 264	Dulles
	Radial Modena 056 Radial Modena	
	V474 V143 Scoby Armel	

VIA CHARLEVOIX

Non-Common Portions from Charlevoix

Charlevoix	HL555 Quebec HL546 St. Felix de	Montreal/Mirabel
	Valois V316	/Dorval
Charlevoix	HL553 V360	Ottawa
Charlevoix	HL553 Midland HL587 V34 Kleinburg	Toronto
Charlevoix	HL553 Ottawa HL546 Kleinburg	
	HL558 London HL586 V98 Desdn V2	
	Rhyme	Detroit
Charlevoix	HL553 Ottawa HL546 J546 Peck	Chicago
	J94 Pullman V84 Pappi	

VIA CHICAGO

There is no non-common portion from Chicago.

VIA HERIN

Non-Common Portions from Herin

Herin	Control 1142 V167	
	Scupp	Boston
Herin	J174 Hyannis Hyannis Transition	
	Suffolk 3 Arrival	Kennedy
Herin	J174 J121 Coyle 100 Radial Coyle	McGuire
Herin	J174 J121 Coyle 100 Radial V312	
	Woodstown	Philadelphia
Herin	J174 J121 Sea Isle	Dover
Herin	J174 Hyannis J150 J62 Kennedy	
	Kennedy 264 Radial Modena 056	Baltimore
	Radial Modena V3 Taylor V93 Jaret	
Herin	J174 Hyannis J150 J62 Kennedy	
	Kennedy 264 Radial Modena 056	Andrews
	Radial Modena V378 Ensue	
Herin	J174 Hyannis J150 J62 Kennedy	
	Kennedy 264 Radial Modena 056	Dulles
	Radial Modena V474 V143	
	Scoby Armel	

VIA HYANNIS

Non-Common Portions from Hyannis

Hyannis	V167 Scupp	Boston
Hyannis	Hyannis Transition Suffolk 3 Arrival	Kennedy
Hyannis	J150 J121 Coyle 100 Radial Coyle	McGuire
Hyannis	J150 J121 Coyle 100 Radial	
	V312 Woodstown	Philadelphia
Hyannis	J150 J121 Sea Isle	Dover
Hyannis	J150 J62 Kennedy Kennedy	
	264 Radial Modena 056	
	Radial Modena V3 Taylo	
	V93 Jaret	Baltimore
Hyannis	J150 J62 Kennedy Kennedy	
	264 Radial Modena 056	
	Radial Modena V378 Ensue	Andrews
Hyannis	J150 J62 Kennedy Kennedy	
	264 Radial Modena 056	
	Radial Modena V474 V143	
	Scoby Armel	Dulles

VIA KENNEBUNK

Non-Common Portions from Kennebunk

Kennebunk	V167 Scupp	Boston
Kennebunk	Kennebunk Transition Saybrook 3 Arrival	Kennedy
Kennebunk	J55 J121 Coyle 100 Radial Coyle	McGuire
Kennebunk	J55 J121 Coyle 100 Radial V312	
	Woodstown	Philadelphia
Kennebunk	J55 J121 Sea Isle	Dover
Kennebunk	J581 Kennedy Kennedy 264 Radial	
	Modena 056 Radial Modena V3 Taylo	
	V93 Jaret	Baltimore
Kennebunk	J581 Kennedy Kennedy 264 Radial	
	Modena 056 Radial Modena V378 Ensue	Andrews
Kennebunk	J581 Kennedy Kennedy 264 Radial	
	Modena 056 Radial Modena V474 V143	
	Scoby Armel	Dulles

VIA MIDLAND

Non-Common Portions from Midland

Midland	HL587 V34 Kleinburg	Toronto
Midland	HL545 London HL586 V98 Desdn	
	V2 Rhyme	Detroit

VIA MONTREAL/MIRABEL/DORVAL

There is no non-common portion from Montreal/Mirabel/Dorval.

VIA NANTUCKET

Non-Common Portions from Nantucket

Nantucket	Nantucket 308 Radial J150	
	Hampton Suffolk 3 Arrival	Kennedy

NAT- 14**VIA RIVIERE DU LOUP**

Non-Common Portions from Riviere du Loup

Riviere du Loup	HL560 Quebec HL546 St. Felix de Valois V316	Montreal/Mirabel /Dorval
Riviere du Loup	Charlevoix H553 V360	Ottawa
Riviere du Loup	Charlevoix HL553 Midland HL587 V34 Kleinburg	Toronto
Riviere du Loup	Charlevoix HL553 Ottawa HL546 Kleinburg HL558 London HL586 V98 Desdn V2 Rhyme	Detroit
Riviere du Loup	Charlevoix HL553 Ottawa HL546 J546 Peck J94 Pullman V84 Pappi	Chicago

VIA SHERBROOKE

Non-Common Portions from Sherbrooke

Sherbrooke	HL500 V300 St. Jean (Que)	Montreal/Mirabel /Dorval
Sherbrooke	HL500 St. Jean (Que) V487 Montreal V316	Ottawa
Sherbrooke	HL500 Ottawa HL553 Midland HL587 V34 Kleinburg	Toronto
Sherbrooke	HL500 Ottawa HL546 Kleinburg HL558 London HL586 V98 Desdn V2 Rhyme	Detroit
Sherbrooke	HL500 Ottawa HL546 J546 Peck J94 Pullman V84 Pappi	Chicago

VIA YARMOUTH

Non-Common Portions from Yarmouth

Yarmouth	HL575 J575 Scupp	Boston
Yarmouth	HL585 J585 J150 Hyannis Hyannis Transition Suffolk 3 Arrival	Kennedy
Yarmouth	HL585 J585 J150 J121 Coyle 100 Radial Coyle	McGuire
Yarmouth	HL585 J585 J150 J121 Coyle 100 Radial V312 Woodstown	Philadelphia Dover
Yarmouth	HL585 J585 J150 J121 Sea Isle	
Yarmouth	HL585 J585 J150 J62 Kennedy Kennedy 264 Radial Modena 056 Radial Modena V3 Taylo V93 Jaret	Baltimore
Yarmouth	HL585 J585 J150 J62 Kennedy Kennedy 264 Radial Modena 056 Radial Modena V378 Ensue	Andrews
Yarmouth	HL585 J585 J150 J62 Kennedy Kennedy 264 Radial Modena 056 Radial Modena V474 V143 Scoby Armel	Dulles

TERMINAL AREA GRAPHIC NOTICES

Under this heading, on the following pages, will be found a number of graphics showing areas of concentrated traffic for the information and guidance of pilots operating under VFR in the terminal areas depicted. The graphics are intended to assist

VFR pilots planning flight in the areas and in many instances recommended or suggested VFR routes/corridors are shown. The information presented is in no way to be considered mandatory or "legal"; it is advisory only.

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INDEX OF TERMINAL AREA GRAPHIC NOTICES

Term-3



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MAJOR REVISIONS

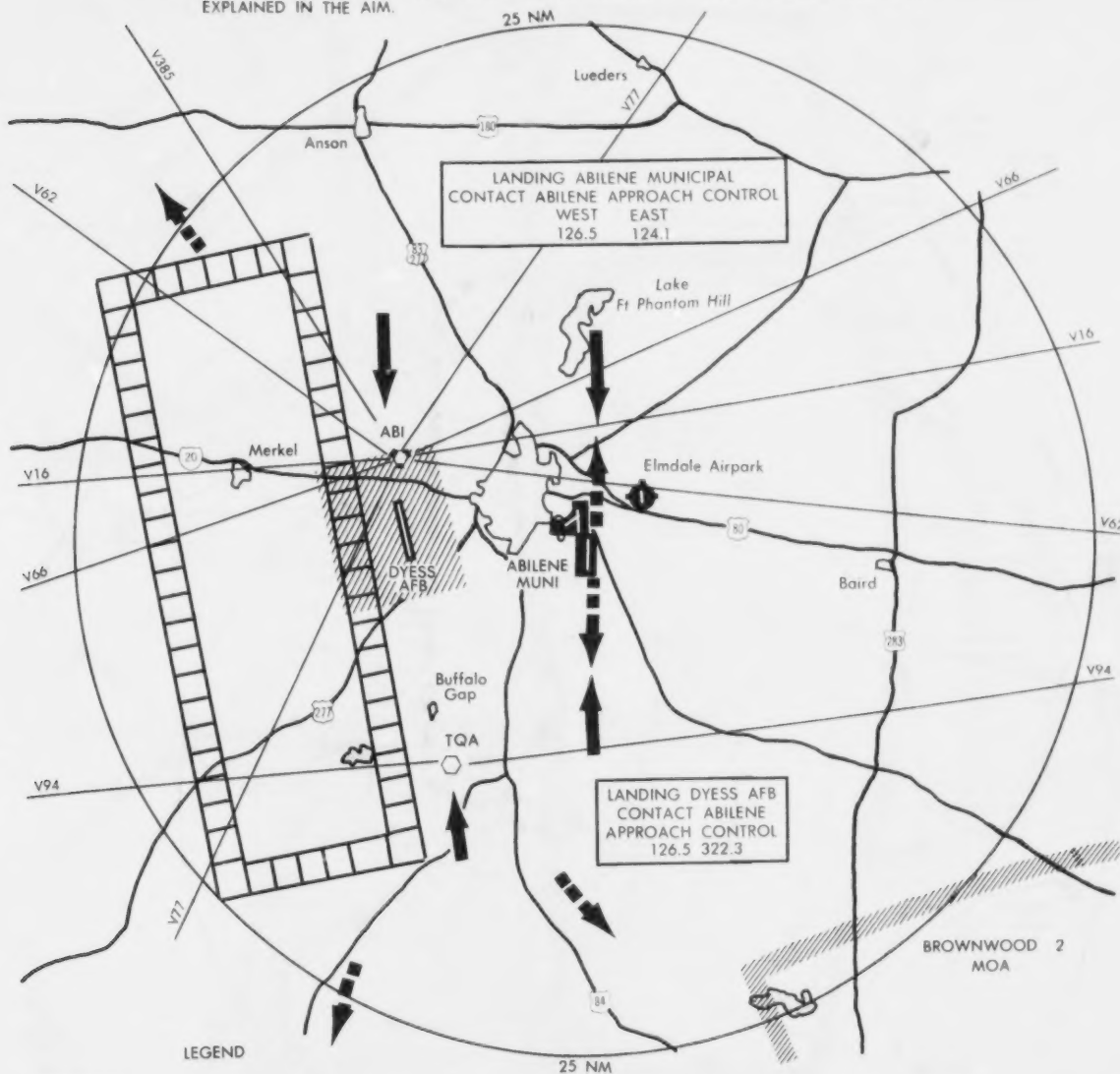
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TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term-5

ABILENE-DYESS, TEXAS

THIS GRAPHIC SHOWS THE PRINCIPLE IFR JET TRAFFIC FLOWS. AIRCRAFT LANDING ABILENE MUNICIPAL OR DYESS AFB ARE ENCOURAGED TO CONTACT APPROACH CONTROL APPROXIMATELY 25 MILES OUT FOR STAGE II SERVICES. (SEE FREQUENCY BOXES BELOW) RADAR TRAFFIC ADVISORY SERVICE WILL BE PROVIDED VFR AIRCRAFT ON A TRAFFIC PERMITTING BASIS. THIS SERVICE DOES NOT RELIEVE PILOTS OF THEIR RESPONSIBILITY TO SEE AND AVOID OTHER AIRCRAFT. STAGE II RADAR SERVICE IS EXPLAINED IN THE AIM.



Prepared by the National Ocean Survey
at the direction of the
FEDERAL AVIATION ADMINISTRATION

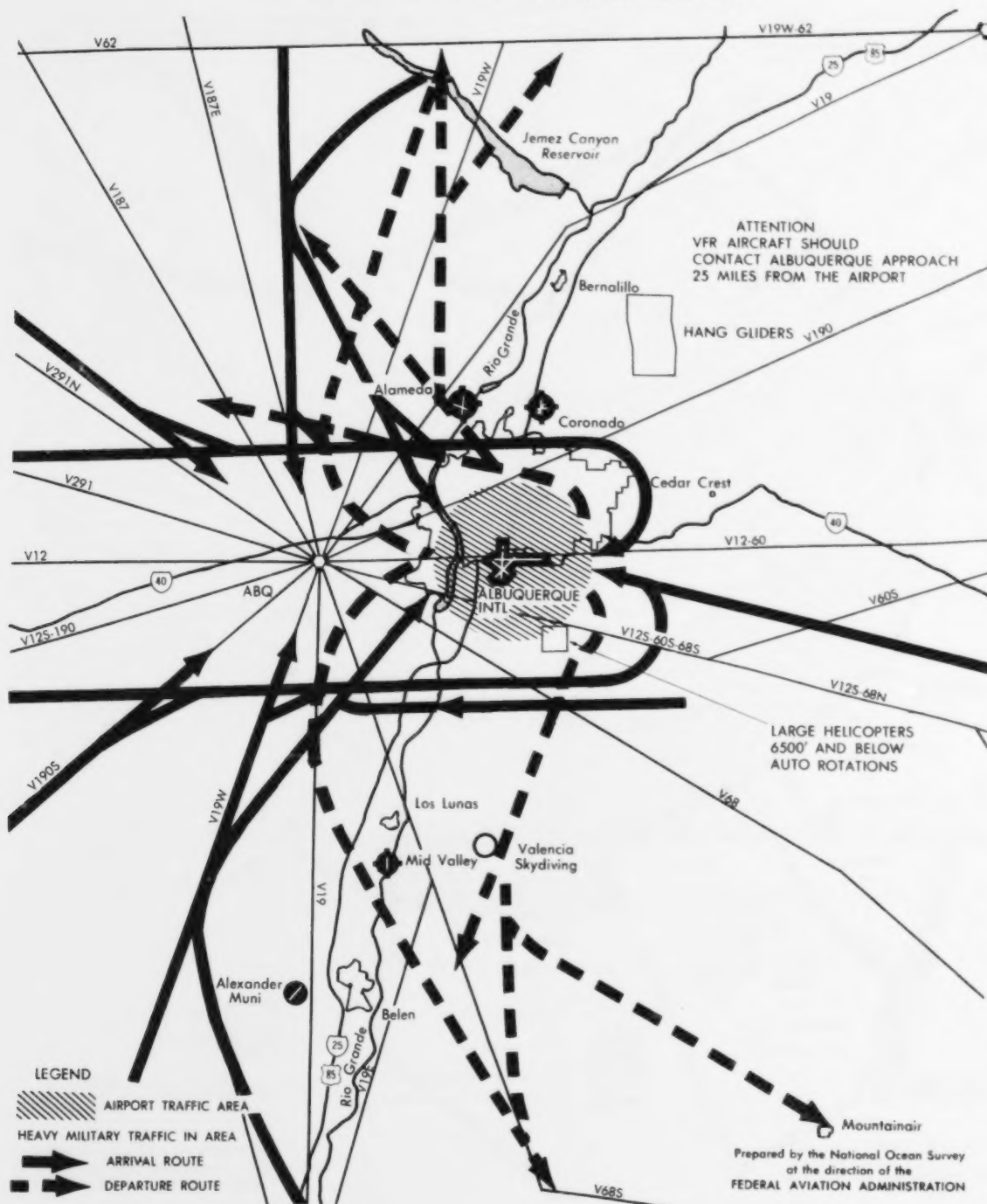
THIS NOTICE DEPICTS THE FLOW OF AIR TRAFFIC WITHIN THE HOLLOMAN AREA. THE PURPOSE OF THE CHART IS TO ASSIST PILOTS OPERATING VFR IN PLANNING THEIR ROUTE INTO AND THROUGH THE AREA. VFR AIRCRAFT SHOULD CONTACT HOLLOMAN APPROACH CONTROL ON 120.6 OR 324.3 FOR STAGE II SERVICE. CAUTION: HIGH SPEED JET AIRCRAFT CROSSING HIGHWAY 54, EAST TO WEST AT OR BELOW 2000 AGL IN THE VICINITY OF THREE RIVERS, NEW MEXICO.



TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term-7

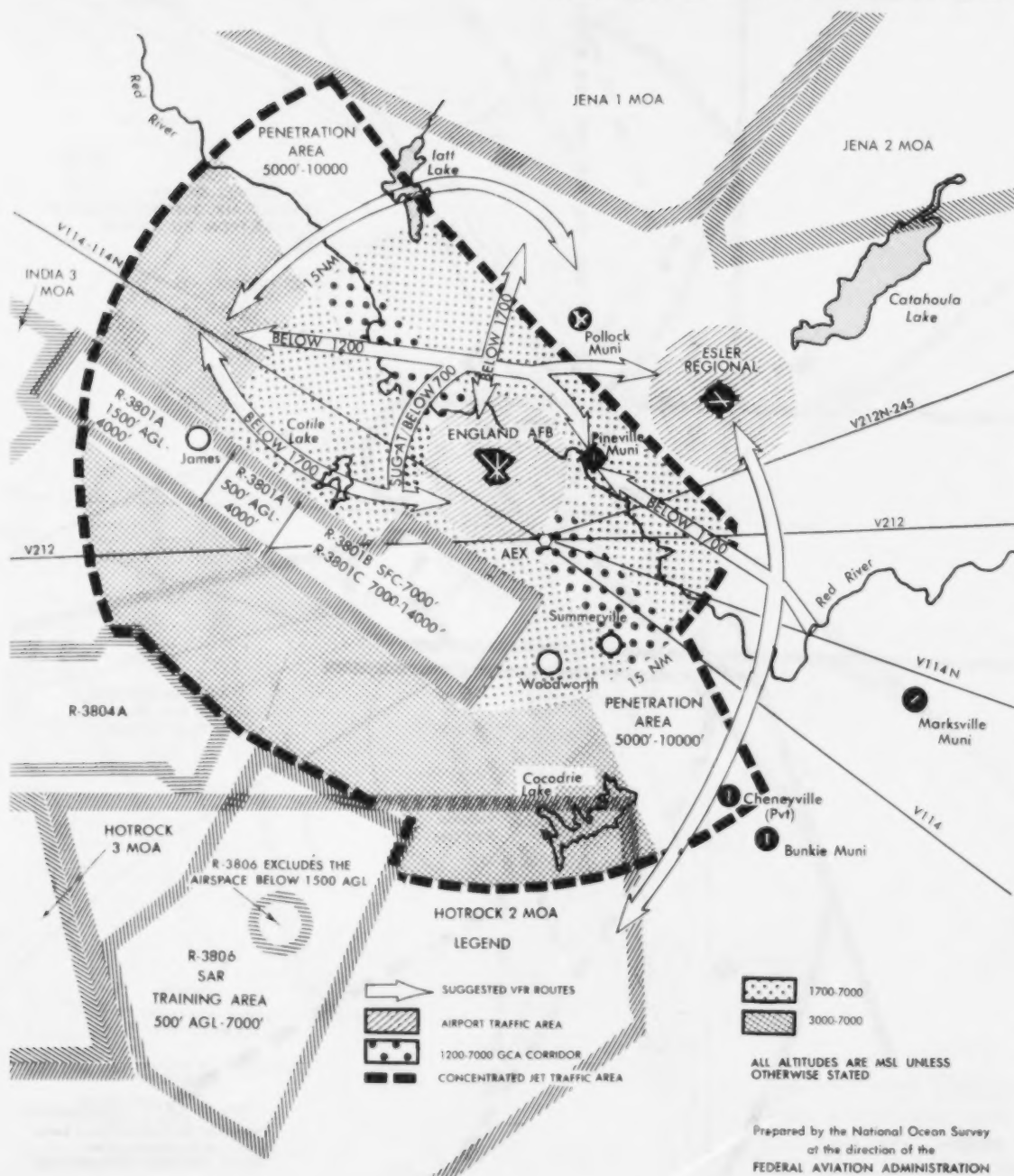
ALBUQUERQUE, NEW MEXICO
ALBUQUERQUE INTERNATIONAL AIRPORT



TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

ALEXANDRIA, LOUISIANA

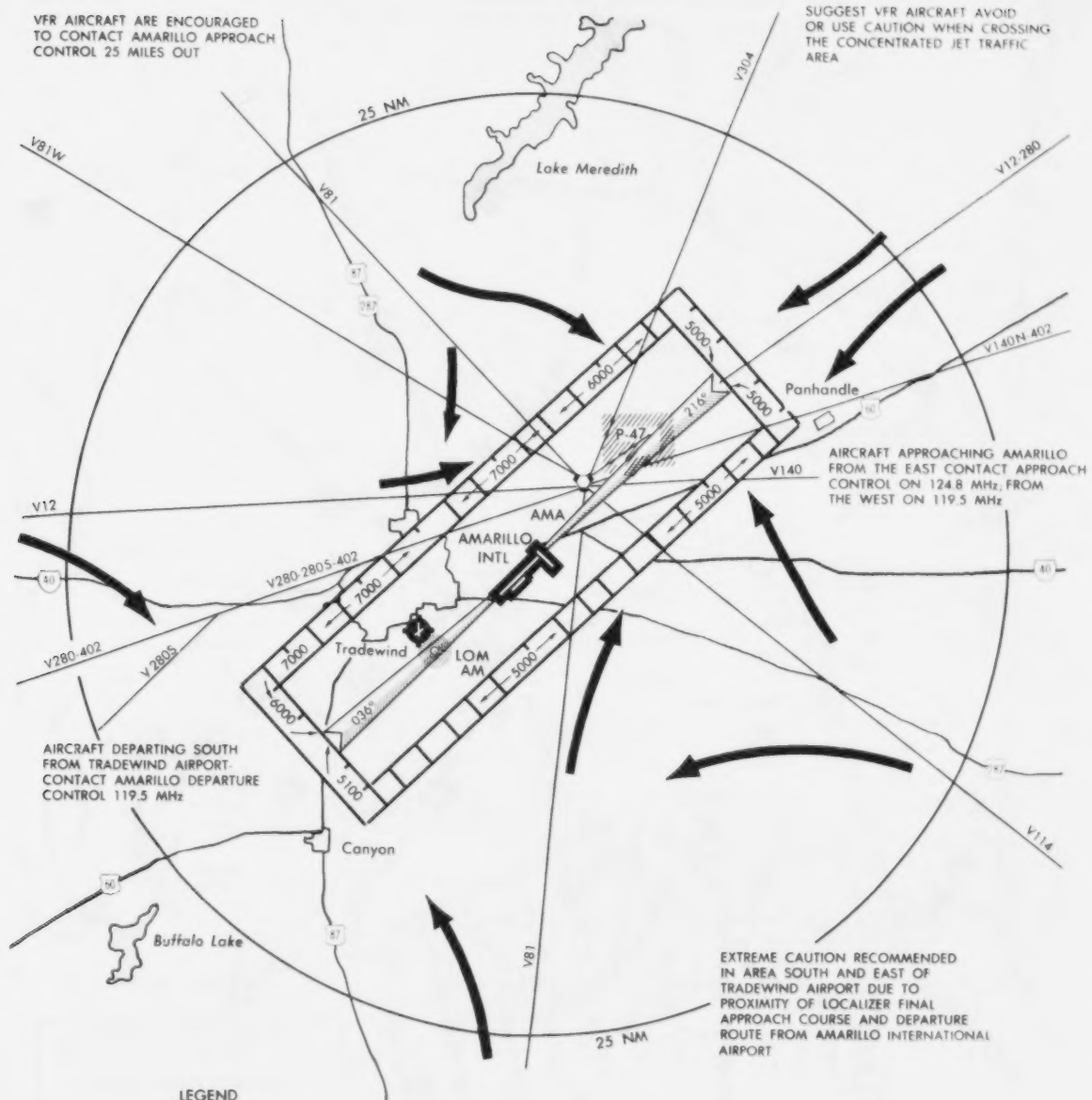
VFR PILOTS ARE ENCOURAGED TO CONTACT ALEXANDRIA
APPROACH CONTROL FOR TRAFFIC ADVISORY ON 118.2 MHZ



TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term-9

AMARILLO, TEXAS
AMARILLO INTERNATIONAL



LEGEND



RADAR VECTOR PATTERN
CONCENTRATED JET TRAFFIC AREA



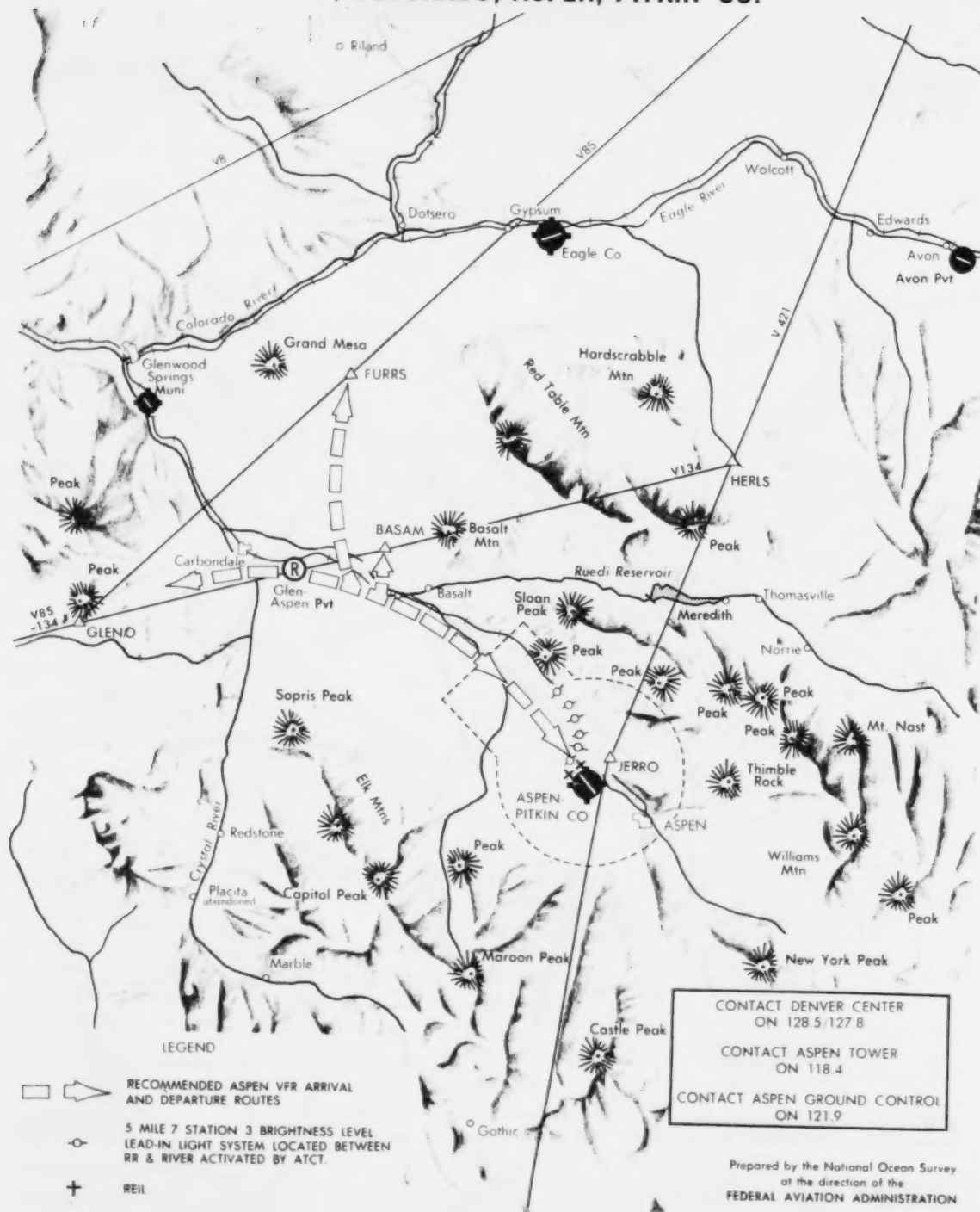
TURBO JET ARRIVAL ROUTE

Prepared by the National Ocean Survey
at the direction of the
FEDERAL AVIATION ADMINISTRATION

26 NOV 1981

TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

ASPEN, COLORADO, ASPEN, PITKIN CO.

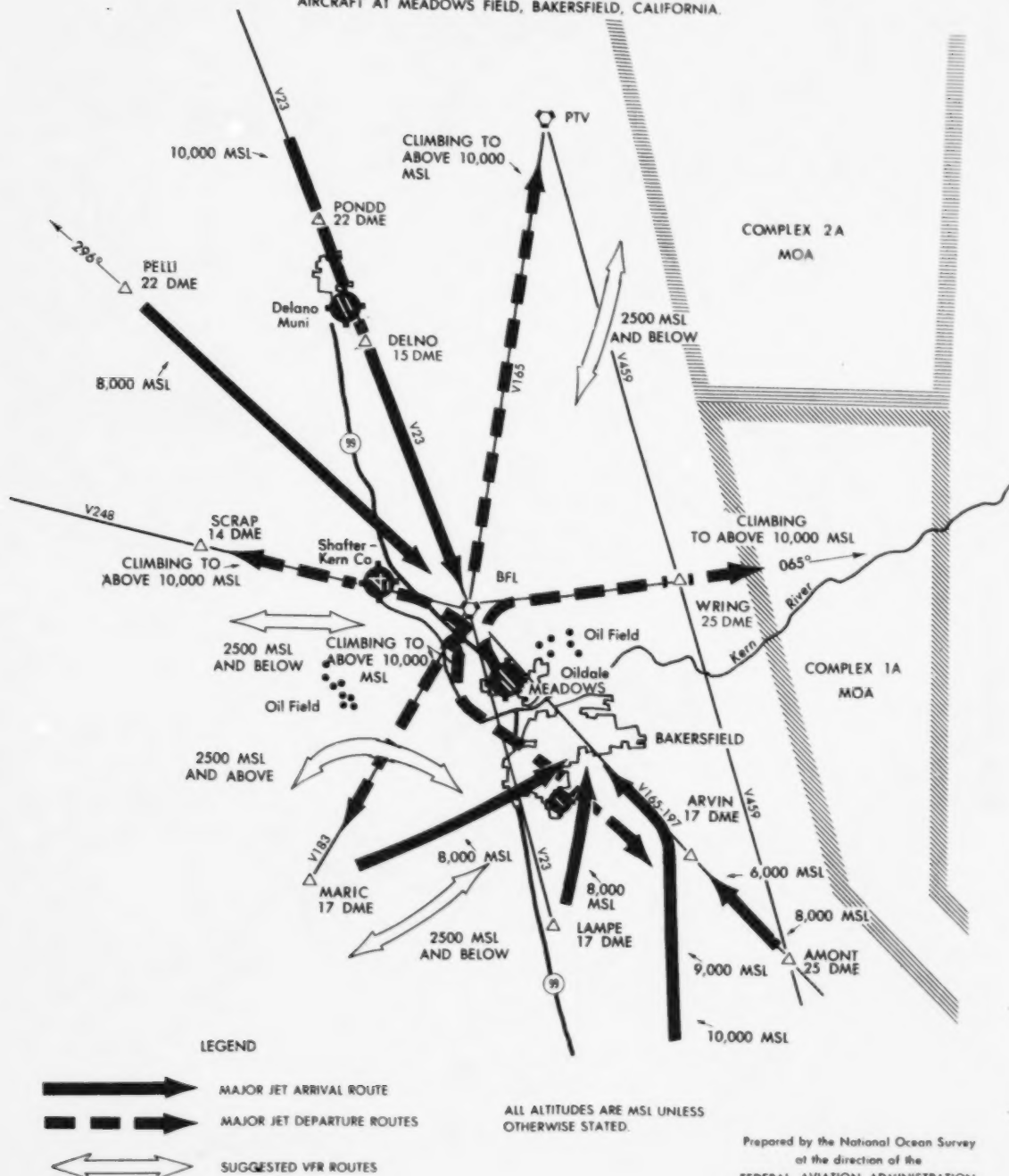


TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term -11

BAKERSFIELD, CALIFORNIA

THIS CHART SHOWS THE ARRIVAL AND DEPARTURE ROUTES MOST FREQUENTLY USED BY HIGH PERFORMANCE AIRCRAFT AT MEADOWS FIELD, BAKERSFIELD, CALIFORNIA.



Term-12

TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)



LEGEND

- CONCENTRATED JET TRAFFIC AREA, SFC TO 3000 FEET
- VFR ARRIVAL AND DEPARTURE ROUTE
- HIGH DENSITY JET ARRIVAL DEPARTURE ROUTE FL 180

VFR AIRCRAFT CONTACT BEAUFORT APPROACH CONTROL FOR RADAR ADVISORIES ON 120.0 OR IF EAST OF V437, 125.6

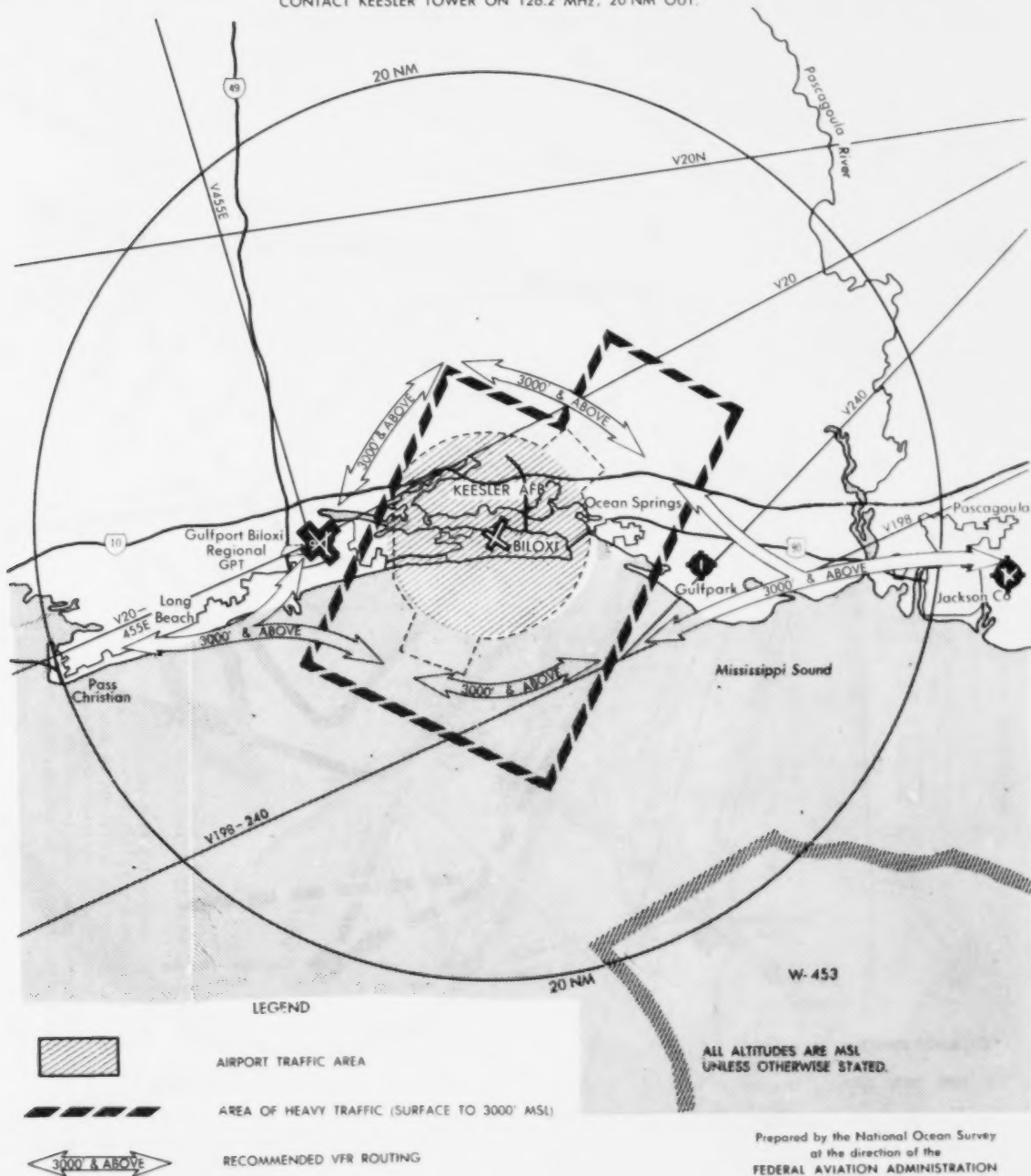
Prepared by the National Ocean Survey
at the direction of the
FEDERAL AVIATION ADMINISTRATION

TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term 13

BILOXI, KEESLER AFB, MISS.

IT IS RECOMMENDED THAT VFR TRAFFIC STAY AT OR ABOVE 3000 FEET, MSL, BECAUSE OF THE HIGH VOLUME OF TRAINING OPERATIONS IN THE AREA. FOR TRAFFIC ADVISORY SERVICE, CONTACT KEESLER TOWER ON 126.2 MHz, 20 NM OUT.



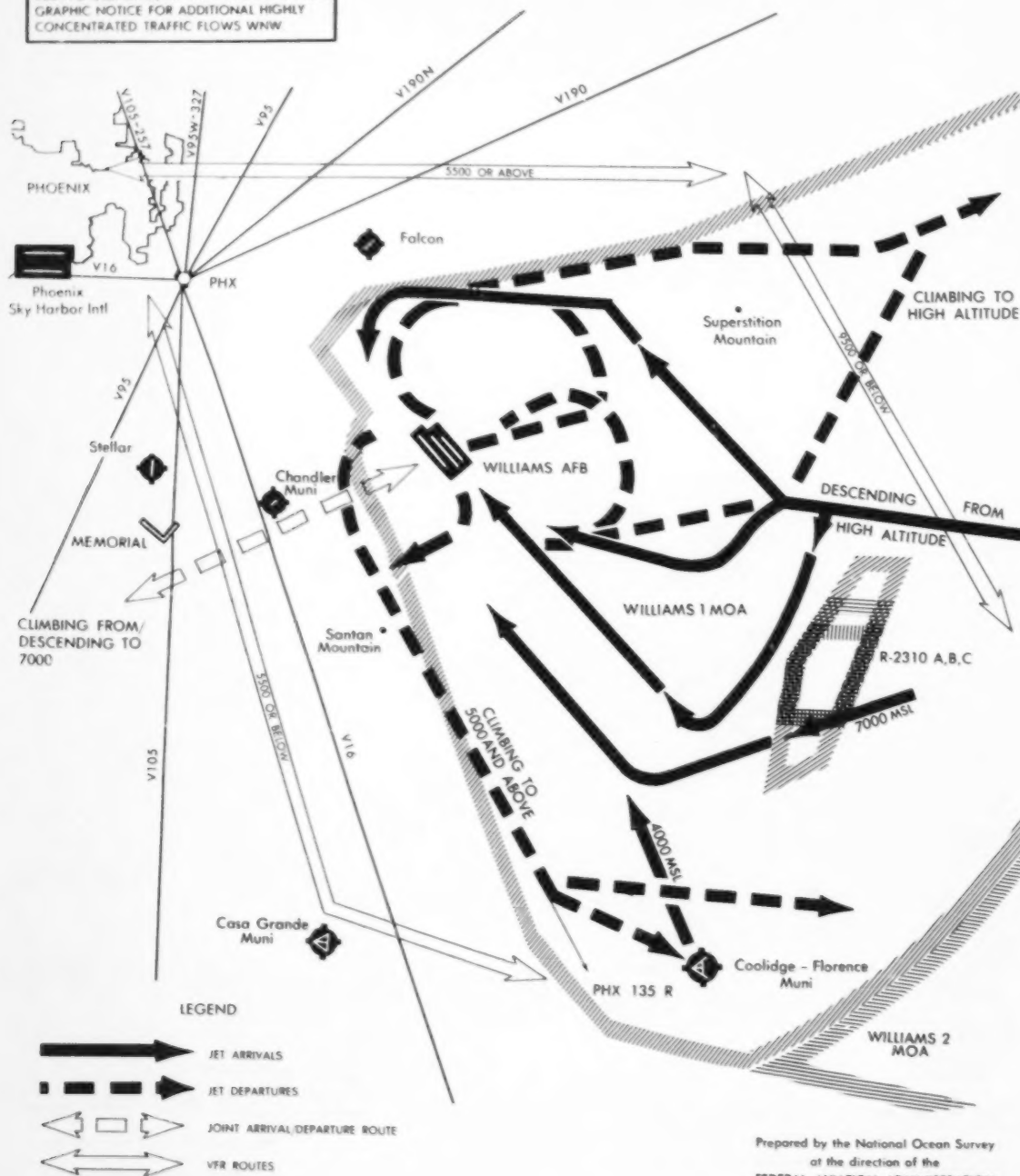
Prepared by the National Ocean Survey
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FEDERAL AVIATION ADMINISTRATION

TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

CHANDLER, WILLIAMS AFB, ARIZ.

THIS CHART SHOWS HIGHLY CONCENTRATED TRAFFIC FLOWS OF MILITARY STUDENT TRAINING ACTIVITY AND SUGGESTED VFR ROUTES FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR IN THE WILLIAMS AIR FORCE BASE - PHOENIX AREA. TO THE EXTENT POSSIBLE, TRAFFIC ADVISORY SERVICE WILL BE PROVIDED BY PHOENIX APPROACH CONTROL ON 120.4.

SEE THE GLENDALE, LUKE AFB TERMINAL AREA GRAPHIC NOTICE FOR ADDITIONAL HIGHLY CONCENTRATED TRAFFIC FLOWS WNW.

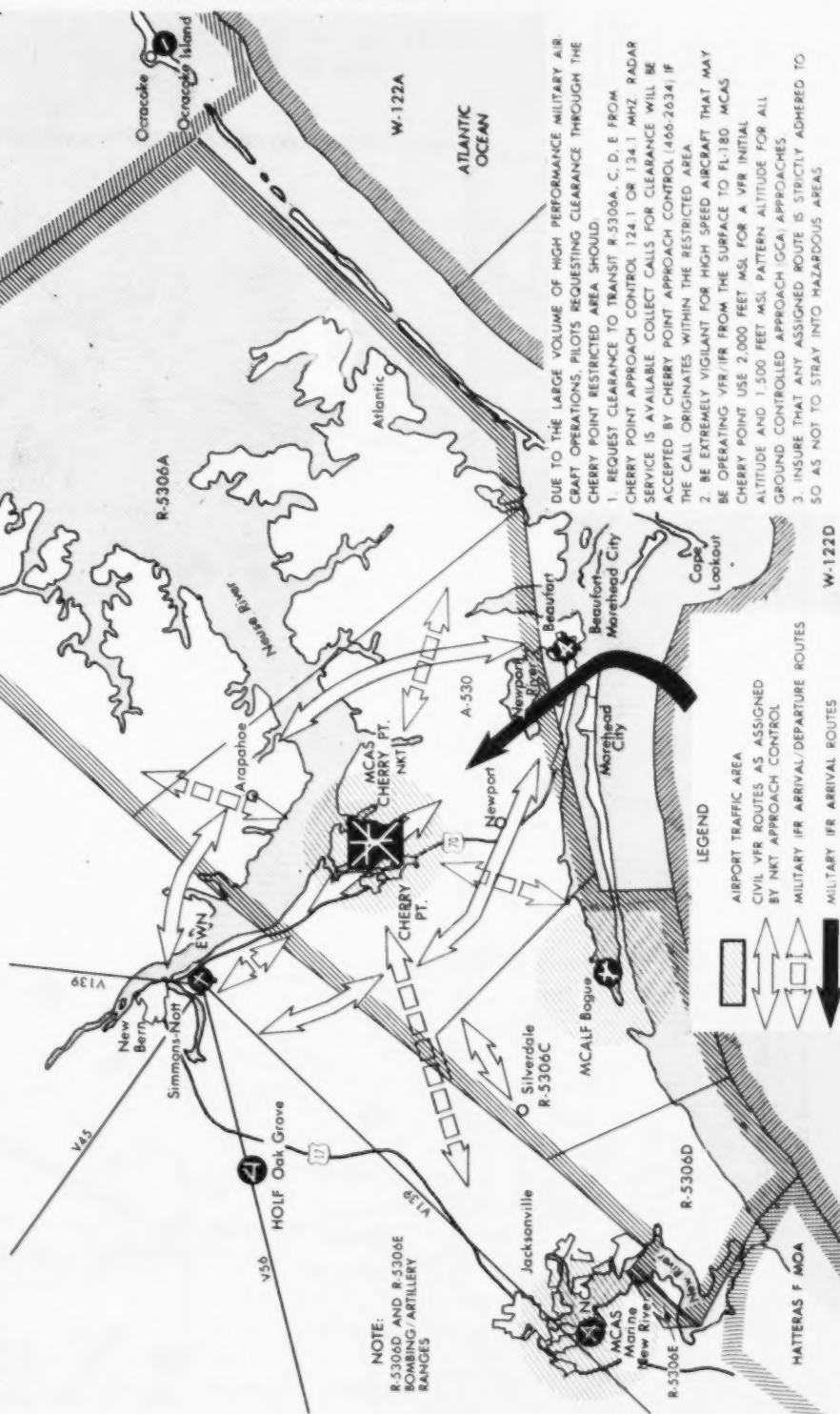


CHERRY POINT MCAS, N.C.

Prepared by the National Ocean Survey
at the direction of the
FEDERAL AVIATION ADMINISTRATION

PILOTS ON IFR FLIGHT PLANS, LANDING AT AIRPORTS WITHIN THE AREA NOT HAVING PUBLISHED INSTRUMENT APPROACH PROCEDURES, WILL BE VECTORED TO A POSITION OVER THESE AIRPORTS AT MINIMUM VECTORING ALTITUDE, AT WHICH TIME PILOTS ARE EXPECTED TO CANCEL IFR OR REQUEST ALTERNATE CLEARANCE. PILOTS WILL BE GIVEN A LOSS COMMUNICATIONS PROCEDURE SPECIFYING AN ALTITUDE TO PROCEED TO NEW BERN VOR FOR A NEW BERN VOR 1 APPROACH.

VFR RULES FOR CONTROLLED AIRSPACE AS DEFINED IN FAR 91 APPLY IN R-5306A, C, D, E.



TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

Term-15

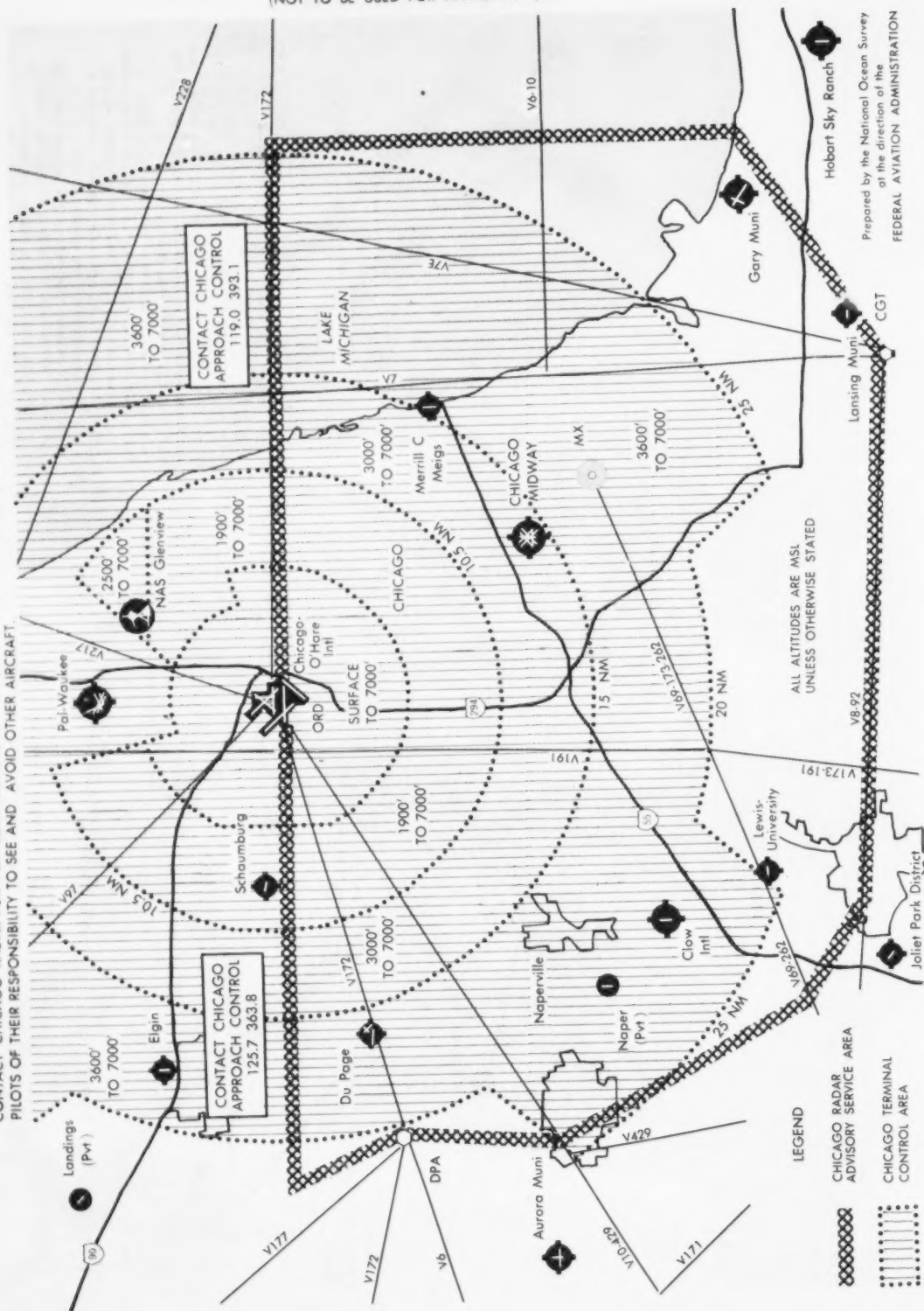
DUE TO THE LARGE VOLUME OF HIGH PERFORMANCE MILITARY AIRCRAFT OPERATIONS, PILOTS REQUESTING CLEARANCE THROUGH THE CHERRY POINT RESTRICTED AREA SHOULD:

1. REQUEST CLEARANCE TO TRANSIT R-5306A, C, D, E FROM CHERRY POINT APPROACH CONTROL 124.1 OR 134.1 MHZ. RADAR SERVICE IS AVAILABLE. COLLECT CALLS FOR CLEARANCE WILL BE ACCEPTED BY CHERRY POINT APPROACH CONTROL (466-2634) IF THE CALL ORIGINATES WITHIN THE RESTRICTED AREA.
2. BE EXTREMELY VIGILANT FOR HIGH SPEED AIRCRAFT THAT MAY BE OPERATING VFR/IFR FROM THE SURFACE TO FL-180. MCAS CHERRY POINT USE 2,000 FEET MSL FOR A VFR INITIAL ALTITUDE AND 1,500 FEET MSL PATTERN ALTITUDE FOR ALL GROUND CONTROLLED APPROACH (GCA) APPROACHES.
3. INSURE THAT ANY ASSIGNED ROUTE IS STRICTLY ADHERED TO SO AS NOT TO STRAY INTO HAZARDOUS AREAS.

TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

CHICAGO, ILLINOIS

VFR PILOTS OPERATING ABOVE, BENEATH OR OUTSIDE OF THE TCA, IN THE HATCHED AREA DEPICTED, ARE ENCOURAGED TO CONTACT CHICAGO RADAR FOR ADVISORY SERVICE ON 126.8 MHz. THIS TRAFFIC ADVISORY SERVICE DOES NOT RELIEVE THE PILOTS OF THEIR RESPONSIBILITY TO SEE AND AVOID OTHER AIRCRAFT.

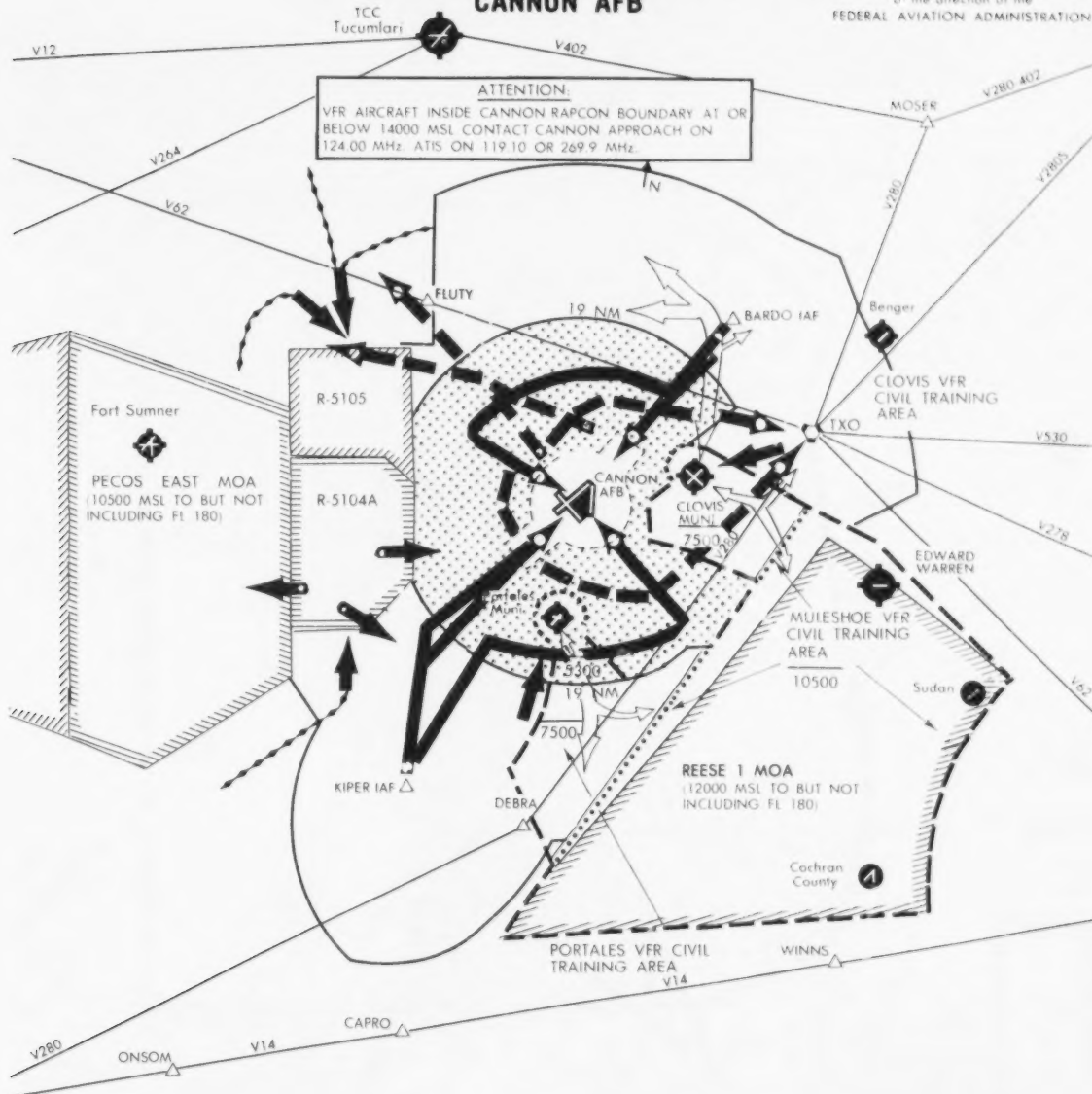


TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term-17

**CLOVIS, NEW MEXICO
CANNON AFB**

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FEDERAL AVIATION ADMINISTRATION



LEGEND

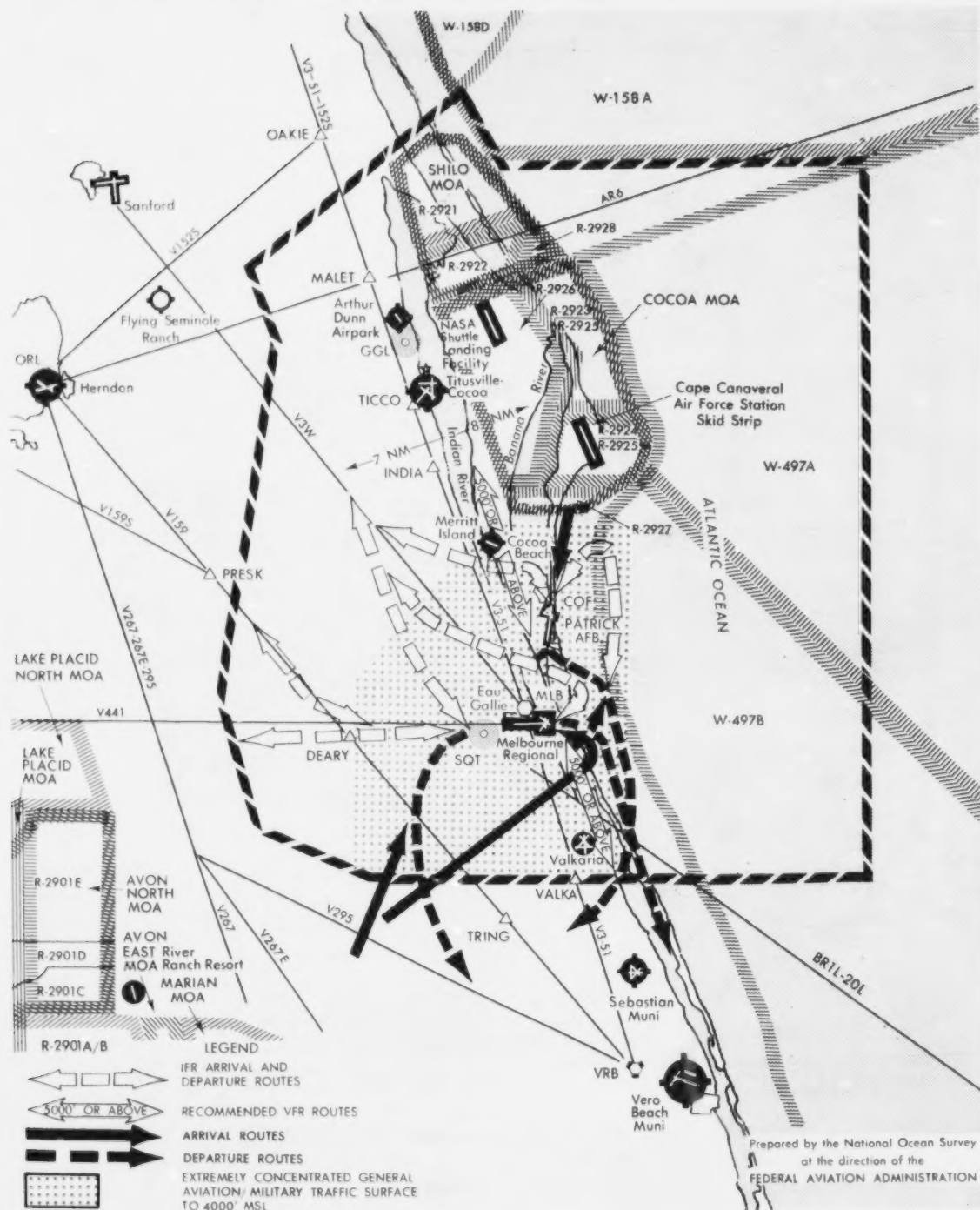
- VFR CIVIL TRAINING AREA RECOMMENDED ALTITUDE DIVIDING LINE: MAINTAIN AT OR BELOW 7500 WEST AT OR BELOW 10500 EAST
- VFR CIVIL TRAINING AREA BOUNDARY: AVOID CROSSING BOUNDARIES WEST OF ALTITUDE DIVIDING LINE. IF UNABLE TO AVOID CROSSING BOUNDARIES USE EXTREME CAUTION. MAINTAIN VFR AT OR BELOW 5300 MSL, AND CONTACT CANNON APPROACH 124.00 OR 119.00 FOR TRAFFIC ADVISORIES.

- CAUTION: CONCENTRATED MILITARY JET TRAFFIC 5800 MSL TO 8000 MSL
- MILITARY JET ARRIVAL ROUTES
- CIVIL IFR ARRIVAL ROUTES
- MILITARY JET DEPARTURE ROUTES
- RECOMMENDED VFR ROUTES
- RESTRICTED AREA ENTRY TRACKS: HIGH SPEED JET TRAFFIC 50 AGL TO 7000 MSL
- RESTRICTED AREA RECOVERY TRACKS: SOUTH AND EAST EXITS VFR AT 7500 MSL

26 NOV 1981

TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

COCOA BEACH, PATRICK AFB, FLA.



Term -19

ALL ARRIVALS AND
OVERFLIGHTS BELOW
9000' CONTACT
COLORADO SPRINGS
APPROACH CONTROL
120.6 340.7

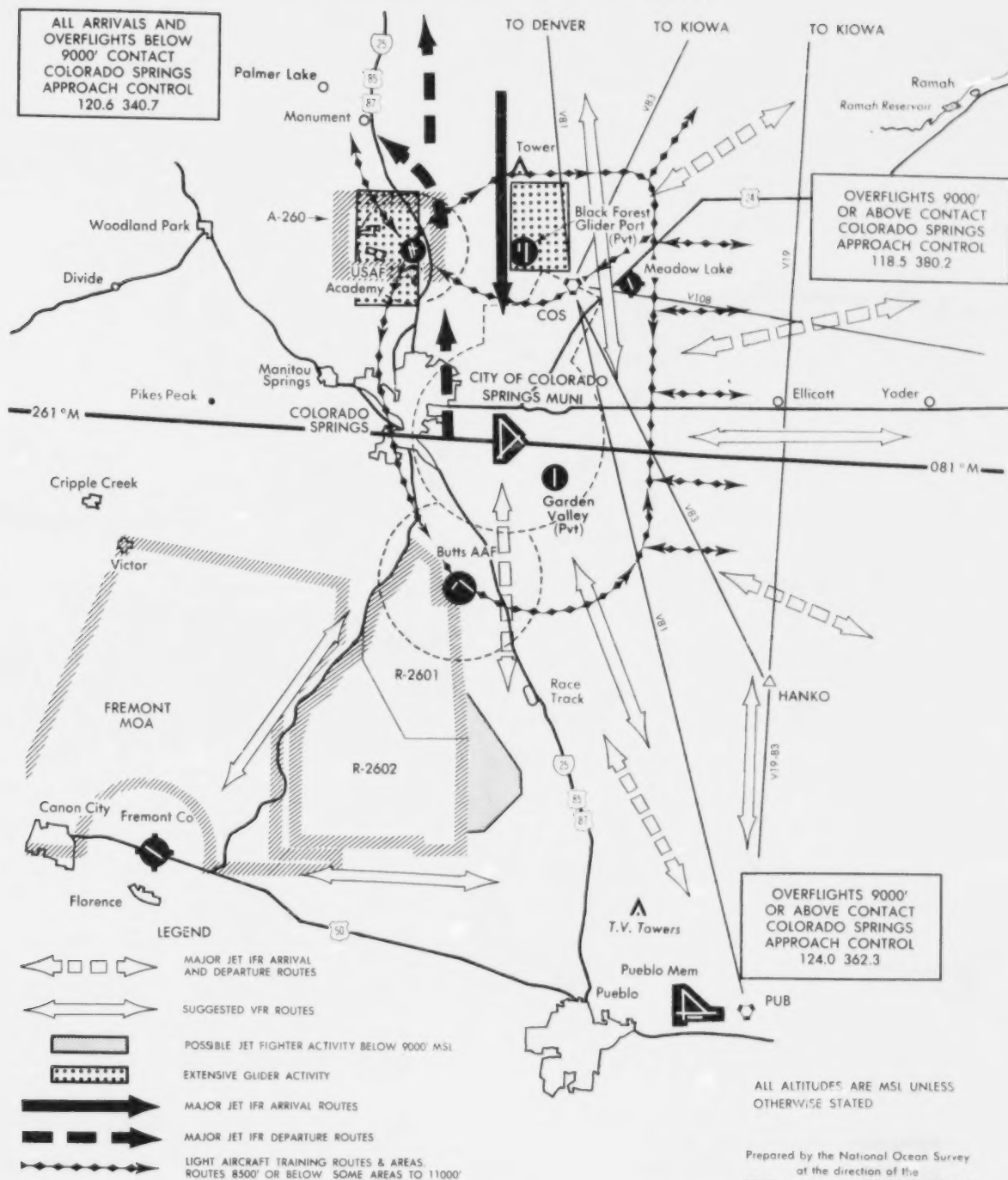
OVERFLIGHTS 9000'
OR ABOVE CONTACT
COLORADO SPRINGS
APPROACH CONTROL
118.5 380.2

OVERFLIGHTS 9000'
OR ABOVE CONTACT
COLORADO SPRINGS
APPROACH CONTROL
124.0 362.3

ALL ALTITUDES ARE MSL UNLESS OTHERWISE STATED

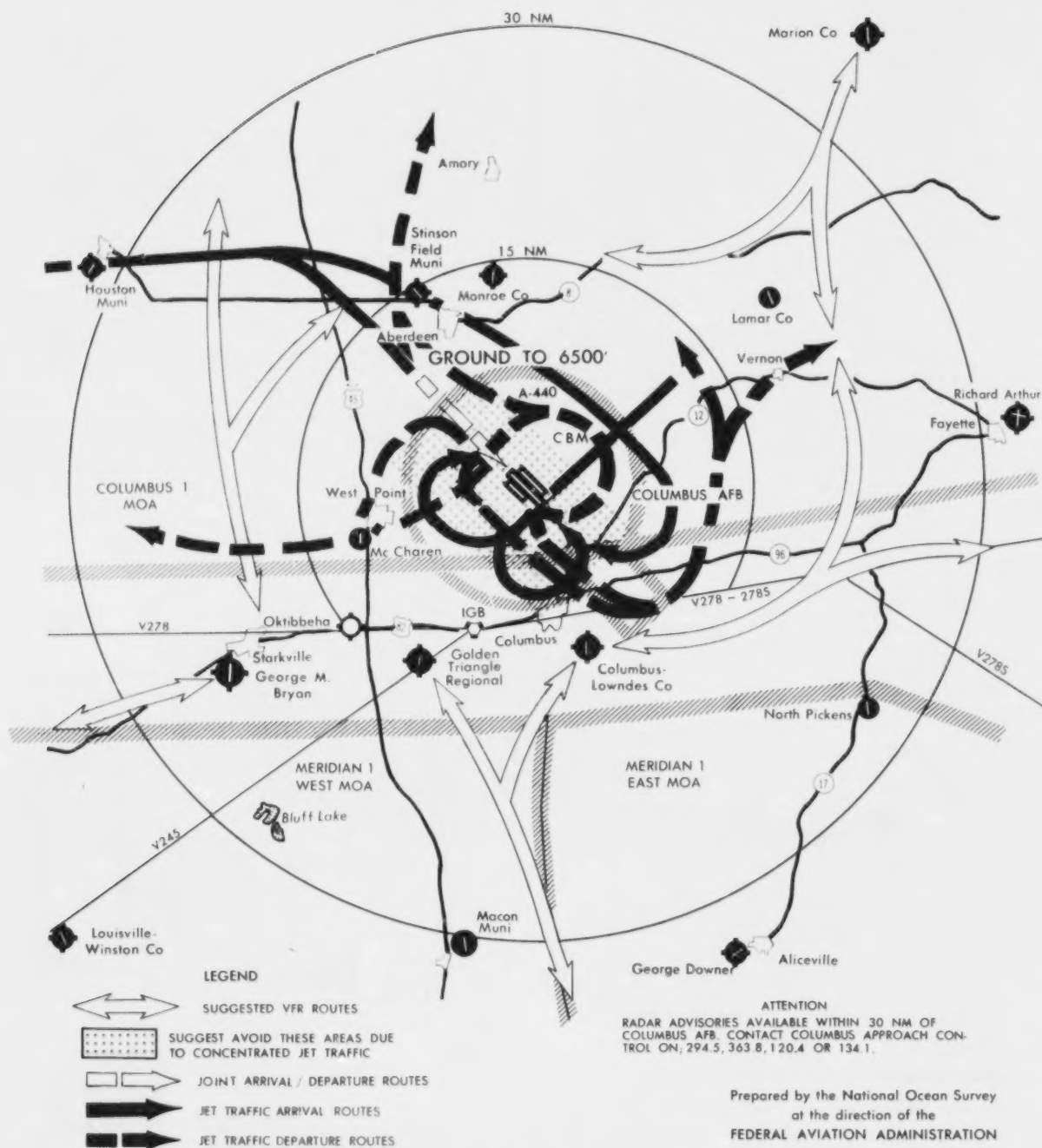
Prepared by the National Ocean Survey
at the direction of the
FEDERAL AVIATION ADMINISTRATION

10 JUL 1980



TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

COLUMBUS AFB, MISSISSIPPI



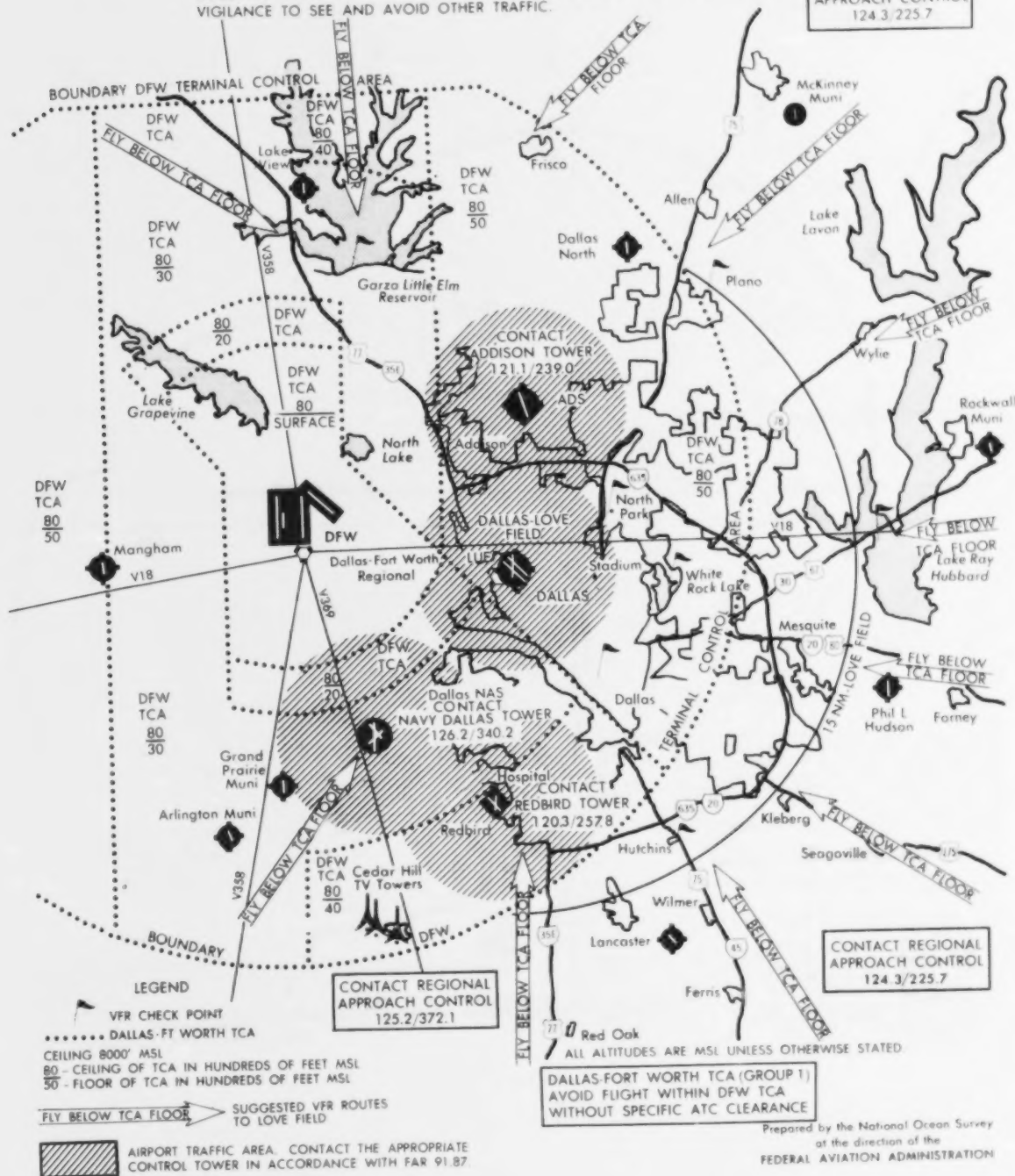
TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term -21

DALLAS LOVE FIELD, TEXAS

DALLAS-FORT WORTH REGIONAL APPROACH CONTROL WILL PROVIDE STAGE II RADAR SERVICE WITHIN 15 MILES OF LOVE FIELD. THIS TRAFFIC ADVISORY SERVICE DOES NOT RELIEVE THE PILOTS OF THEIR RESPONSIBILITY FOR CONTINUED VIGILANCE TO SEE AND AVOID OTHER TRAFFIC.

CONTACT REGIONAL
APPROACH CONTROL
124.3/225.7

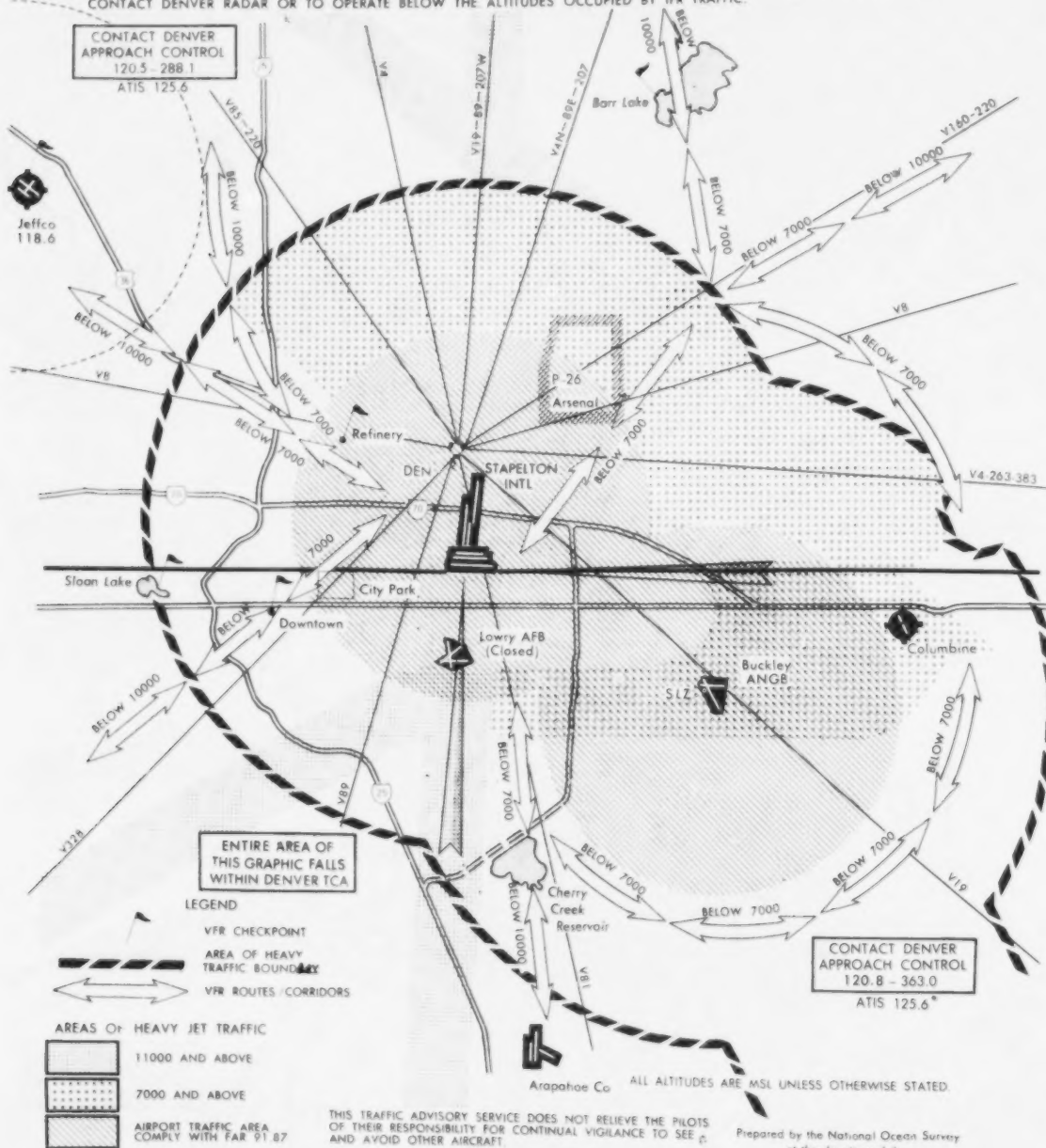


27 JUL 1981

TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

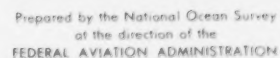
DENVER, COLORADO

THIS MAP SHOWS AREAS OF CONCENTRATED IFR TRAFFIC FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR IN THE DENVER TERMINAL AREA. VFR PILOTS INTENDING TO OPERATE WITHIN THE AREA ARE ENCOURAGED TO CONTACT DENVER RADAR OR TO OPERATE BELOW THE ALTITUDES OCCUPIED BY IFR TRAFFIC.



Term-23

THIS CHART SHOWS AREAS OF CONCENTRATED IFR TRAFFIC FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR IN THE DOVER RADAR APPROACH CONTROL AREA. PILOTS OPERATING HEREIN ARE ENCOURAGED TO CONTACT DOVER APPROACH CONTROL ON 125.9 - 359.3 FOR TRAFFIC ADVISORIES.



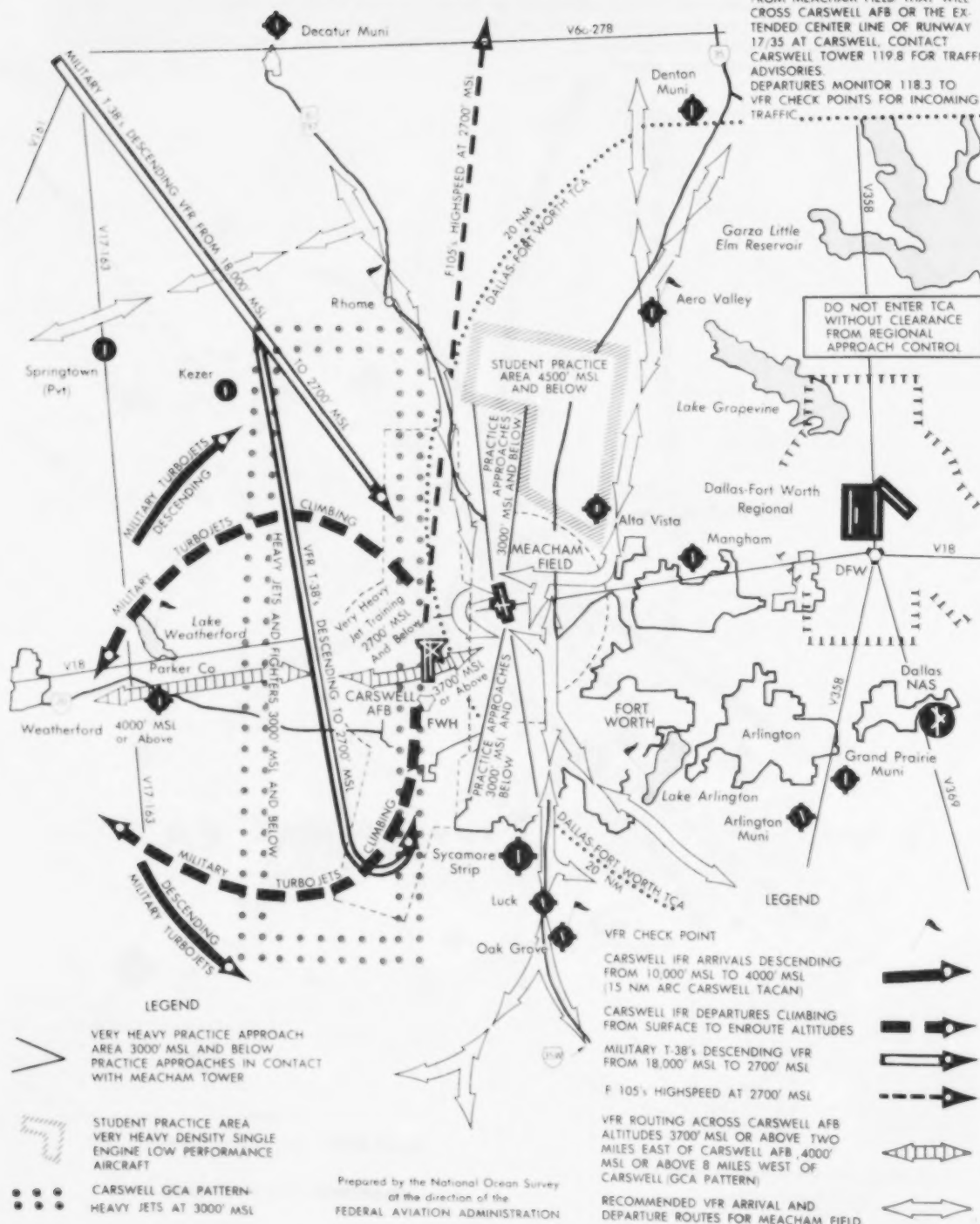
26 NOV 1981

THIS CHART SHOWS CONCENTRATED IFR TRAFFIC FLOWS IN THE TRAVIS AFB AREA. IT HAS BEEN PREPARED TO ASSIST VFR PILOTS IN PLANNING FLIGHT IN THE AREA. VFR PILOTS INTENDING TO OPERATE IN THE AREA ARE ENCOURAGED TO CONTACT TRAVIS APPROACH CONTROL ON 119.9 OR 126.6 MHz FOR RADAR TRAFFIC ADVISORY SERVICE, WHICH WILL BE PROVIDED ON A WORKLOAD PERMITTING BASIS. TRAFFIC ADVISORY SERVICE DOES NOT RELIEVE PILOTS OF THEIR RESPONSIBILITY FOR CONTINUAL VIGILANCE TO SEE AND AVOID OTHER AIRCRAFT.



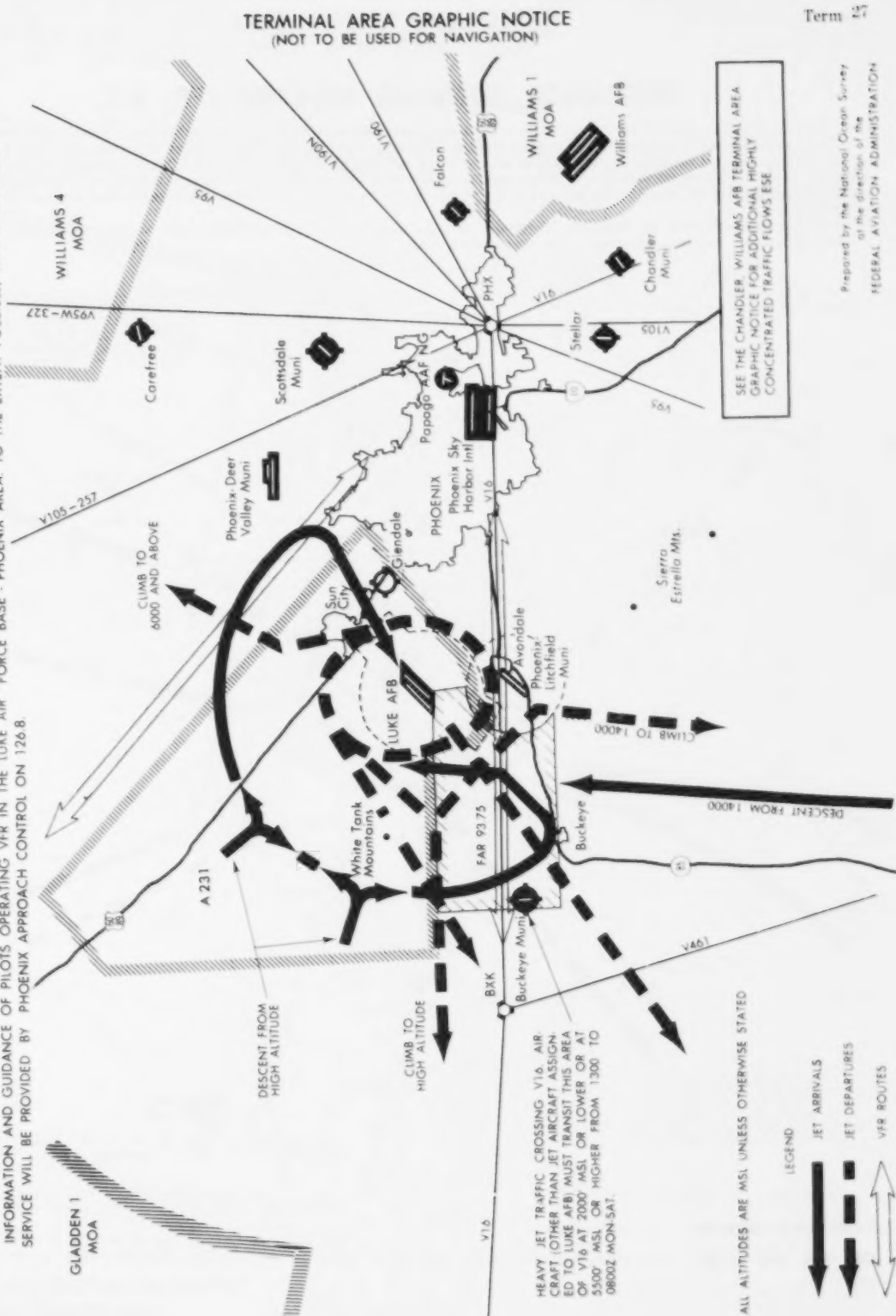
TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)
FORT WORTH, TEXAS
MEACHAM FIELD, CARSWELL AFB

AIRCRAFT REQUESTING RADAR ADVISORIES CONTACT REGIONAL APPROACH CONTROL 120.5. ALL AIRCRAFT OPERATING TO AND FROM MEACHAM FIELD THAT WILL CROSS CARSWELL AFB OR THE EXTENDED CENTER LINE OF RUNWAY 17/35 AT CARSWELL, CONTACT CARSWELL TOWER 119.8 FOR TRAFFIC ADVISORIES. DEPARTURES MONITOR 118.3 TO VFR CHECK POINTS FOR INCOMING TRAFFIC.



THIS CHART SHOWS HIGHLY CONCENTRATED TRAFFIC FLOWS OF MILITARY STUDENT TRAINING ACTIVITY AND SUGGESTED VFR ROUTES FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR IN THE LUKE AIR FORCE BASE - PHOENIX AREA. TO THE EXTENT POSSIBLE, TRAFFIC ADVISORY SERVICE WILL BE PROVIDED BY PHOENIX APPROACH CONTROL ON 126.8.

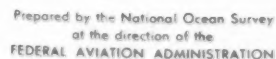
THIS CHART SHOWS HIGHLY CONCENTRATED TRAFFIC FLOWS OF MILITARY STUDENT TRAINING ACTIVITY AND SUGGESTED VFR ROUTES FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR IN THE LUKE AIR FORCE BASE - PHOENIX AREA. TO THE EXTENT POSSIBLE, TRAFFIC ADVISORY SERVICE WILL BE PROVIDED BY PHOENIX APPROACH CONTROL ON 126.8.

Term 2¹

Prepared by the National Ocean Survey
at the direction of the
FEDERAL AVIATION ADMINISTRATION

THIS CHART SHOWS AREAS OF CONCENTRATED IFR AND VFR HIGH PERFORMANCE AIRCRAFT TRAFFIC IN THE VICINITY OF GOLDSBORO-WAYNE. MILITARY AIRCRAFT OPERATING IN THESE AREAS CONSIST OF KC/EC-135'S, B-32'S, F-4'S, AND T-37'S WITHIN 18 NM OF GOLDSBORO-WAYNE. THESE AIRCRAFT OPERATE FROM THE SURFACE TO 6000' MSL. THERE ARE TWO ARRIVAL PATTERNS, THE NORTH PATTERN ALTITUDE IS AT 3000' MSL ON DOWNWIND, AND 1700' MSL ON BASE (EG. THE SOUTH PATTERN ALTITUDE IS AT AN ALTITUDE OF 1700' ON BOTH DOWNWIND AND BASE LEGS. THE SEYMOUR JOHNSON ECHO MOA IS USED BY F-4'S AND T-37'S IN VFR CONDITIONS. AIRCRAFT IN THIS AREA OPERATE FROM 7000' MSL TO FL200 WITH ATC APPROVAL.

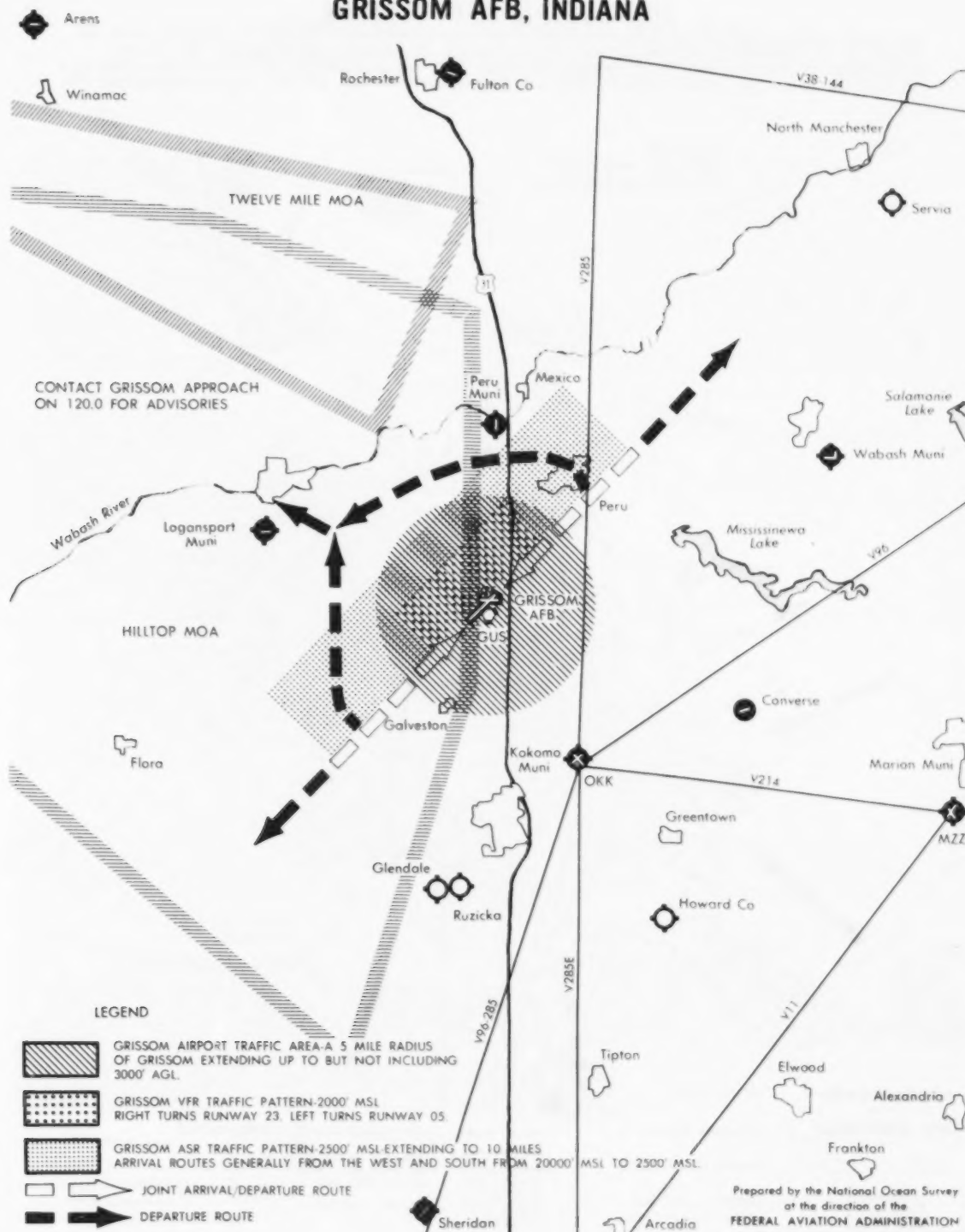
IT IS RECOMMENDED THAT VFR TRAFFIC USE ROUTES AND LATITUDES WHICH WILL AVOID THE DEPICTED AREAS OF CONCENTRATED IFR AND VFR HIGH PERFORMANCE TRAFFIC IN THE SEYMOUR JOHNSON TERMINAL AREA.



TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term 29

GRISSOM AFB, INDIANA

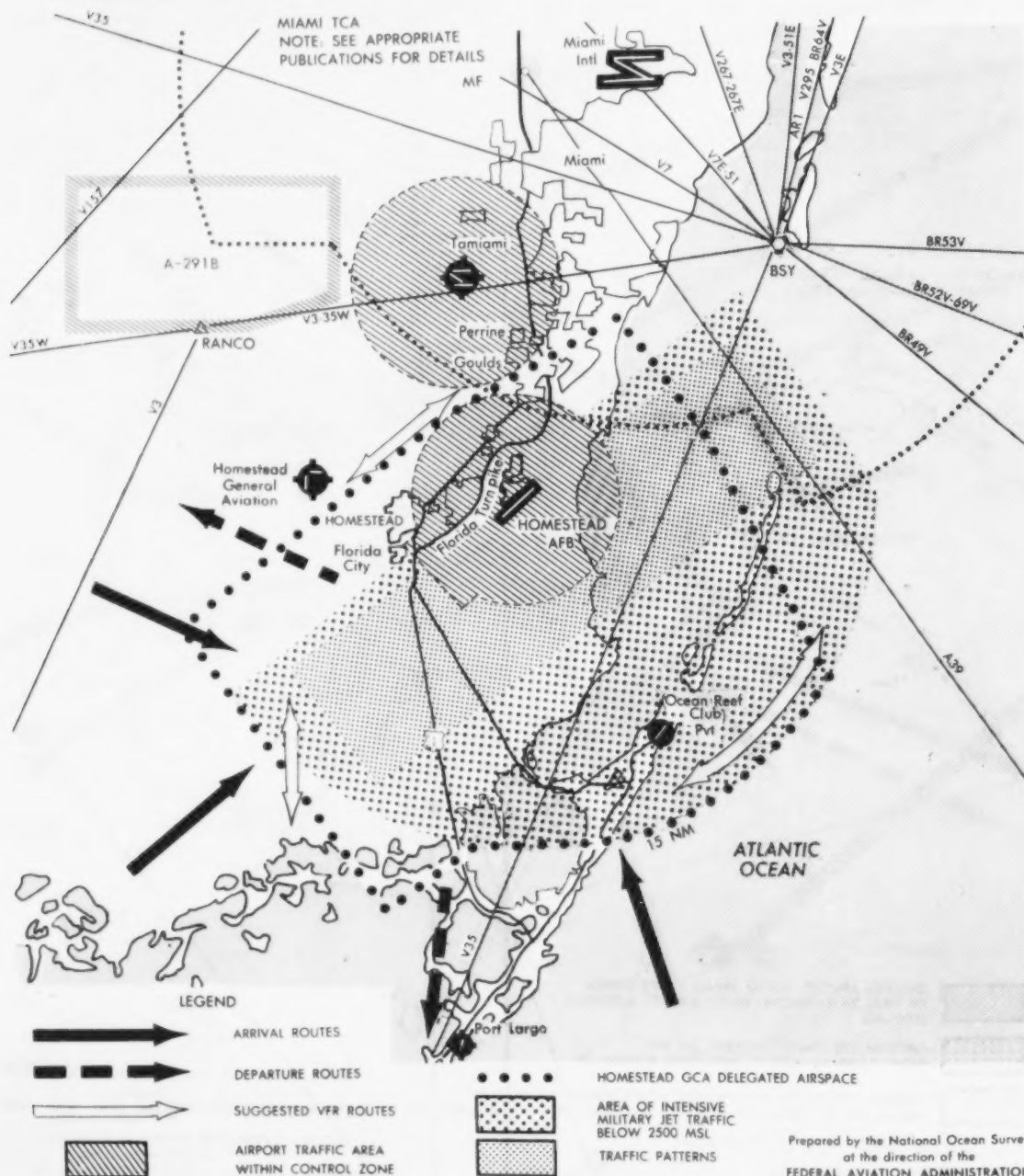


23 MAR 1981

TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

HOMESTEAD AFB, FLORIDA

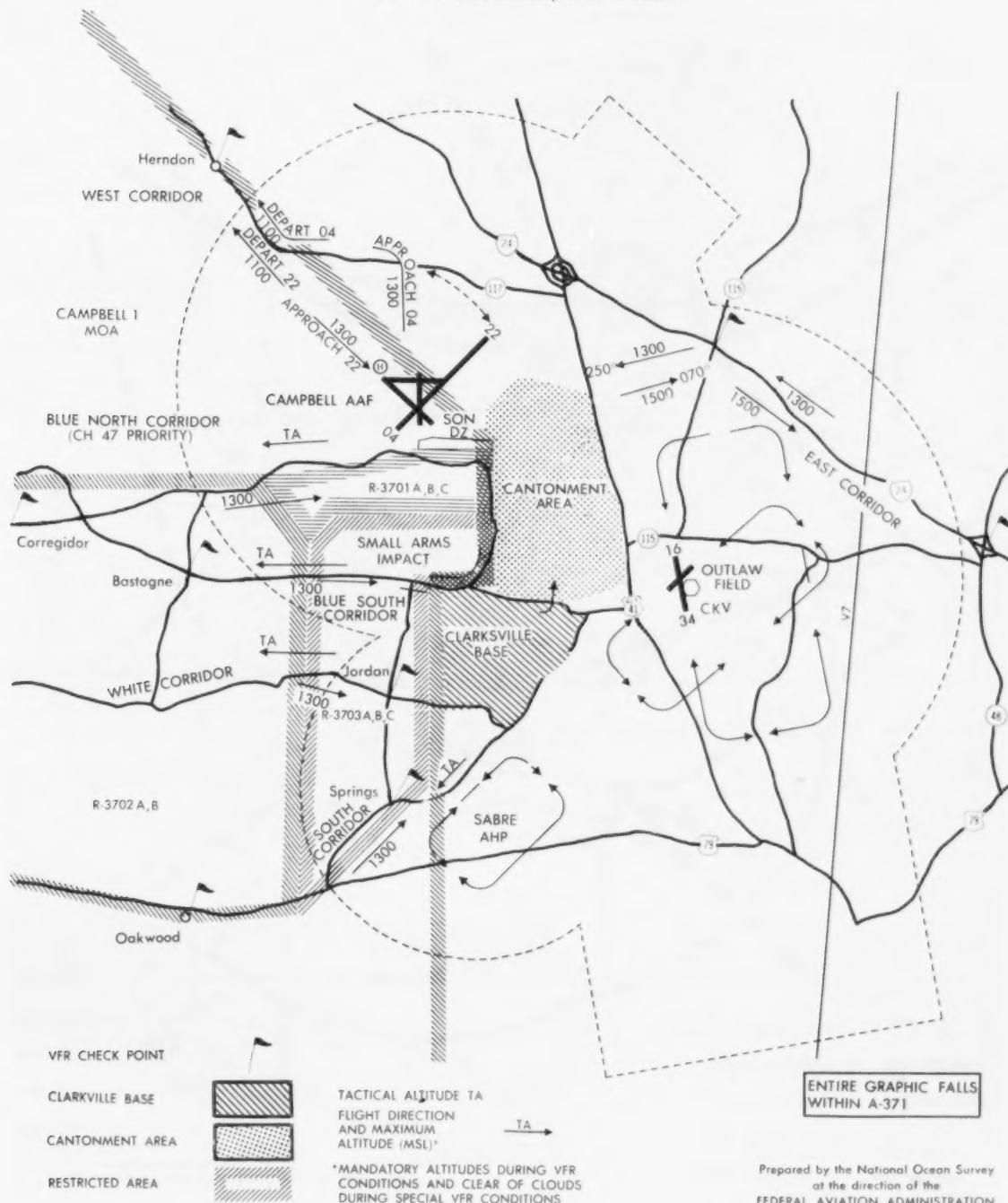
THIS CHART SHOWS AREAS OF CONCENTRATED IFR AND VFR HIGH PERFORMANCE MILITARY JET OPERATIONS IN THE VICINITY OF HOMESTEAD AFB. MILITARY AIRCRAFT OPERATING IN THESE AREAS CONSIST PRIMARILY OF F-4s AND HELICOPTERS. VFR PILOTS INTENDING TO OPERATE WITHIN THE AREA ARE ENCOURAGED TO CONTACT HOMESTEAD GCA ON 123.8 OR HOMESTEAD TOWER ON 126.2. STAGE II SERVICE IS AVAILABLE FOR AIRCRAFT ARRIVING HOMESTEAD AFB.



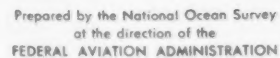
TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term-31

**HOPKINSVILLE, CAMPBELL AAF, KY.
VFR/SPECIAL VFR MILITARY HELICOPTER ROUTES
FORT CAMPBELL, KY. AREA**



THIS CHART DEPICTS THE IFR ARRIVAL/DEPARTURE ROUTES SERVING THE HOUSTON TERMINAL AREA FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR WITHIN THE AREA. PILOTS ARE ENCOURAGED TO CONTACT HOUSTON APPROACH CONTROL FOR TRAFFIC ADVISORY SERVICE.



Term -33

THIS GRAPHIC SHOWS AREAS OF CONCENTRATED IFR TRAFFIC FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR IN THE JACKSONVILLE TERMINAL AREA. PILOTS INTENDING TO OPERATE VFR WITHIN THE AREA ARE ENCOURAGED TO CONTACT JACKSONVILLE APPROACH CONTROL ON 119.0/335.6 WHILE TRANSITING THIS AIRSPACE.

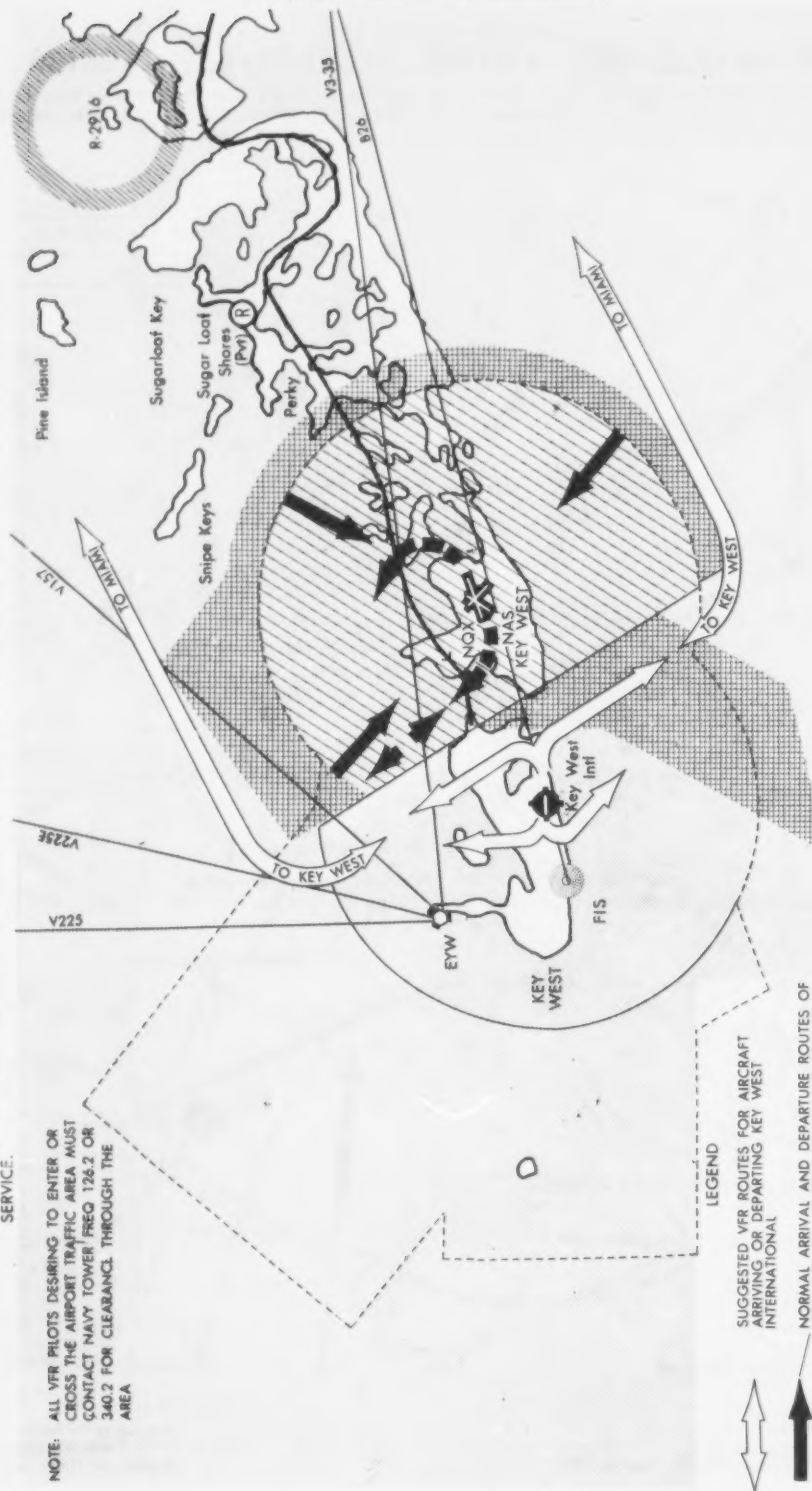


TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

KEY WEST NAS, FLORIDA

THIS CHART SHOWS AREAS OF CONCENTRATED IFR AND VFR HIGH PERFORMANCE JET OPERATIONS IN THE VICINITY OF KEY WEST. MILITARY AIRCRAFT CONSIST PRIMARILY OF A-4, F-4, AND A-5 TYPE AIRCRAFT. ALL VFR PILOTS OPERATING IN THE KEY WEST AREA ARE ENCOURAGED TO CONTACT KEY WEST APPROACH ON 118.7 OR 263.6 FOR RADAR ADVISORY SERVICE.

NOTE: ALL VFR PILOTS DESIRING TO ENTER OR CROSS THE AIRPORT TRAFFIC AREA MUST CONTACT NAVY TOWER FREQ 126.2 OR 340.2 FOR CLEARANCE THROUGH THE AREA



LEGEND

SUGGESTED VFR ROUTES FOR AIRCRAFT
ARRIVING OR DEPARTING KEY WEST
INTERNATIONAL

NORMAL ARRIVAL AND DEPARTURE ROUTES OF
HIGH PERFORMANCE JET AIRCRAFT OPERATING
OUT OF NAVY KEY WEST

NAS KEY WEST AIRPORT TRAFFIC AREA

AREA OF INTENSIVE HIGH PERFORMANCE
JET AIRCRAFT BELOW 2500 FEET

STRAITS OF FLORIDA

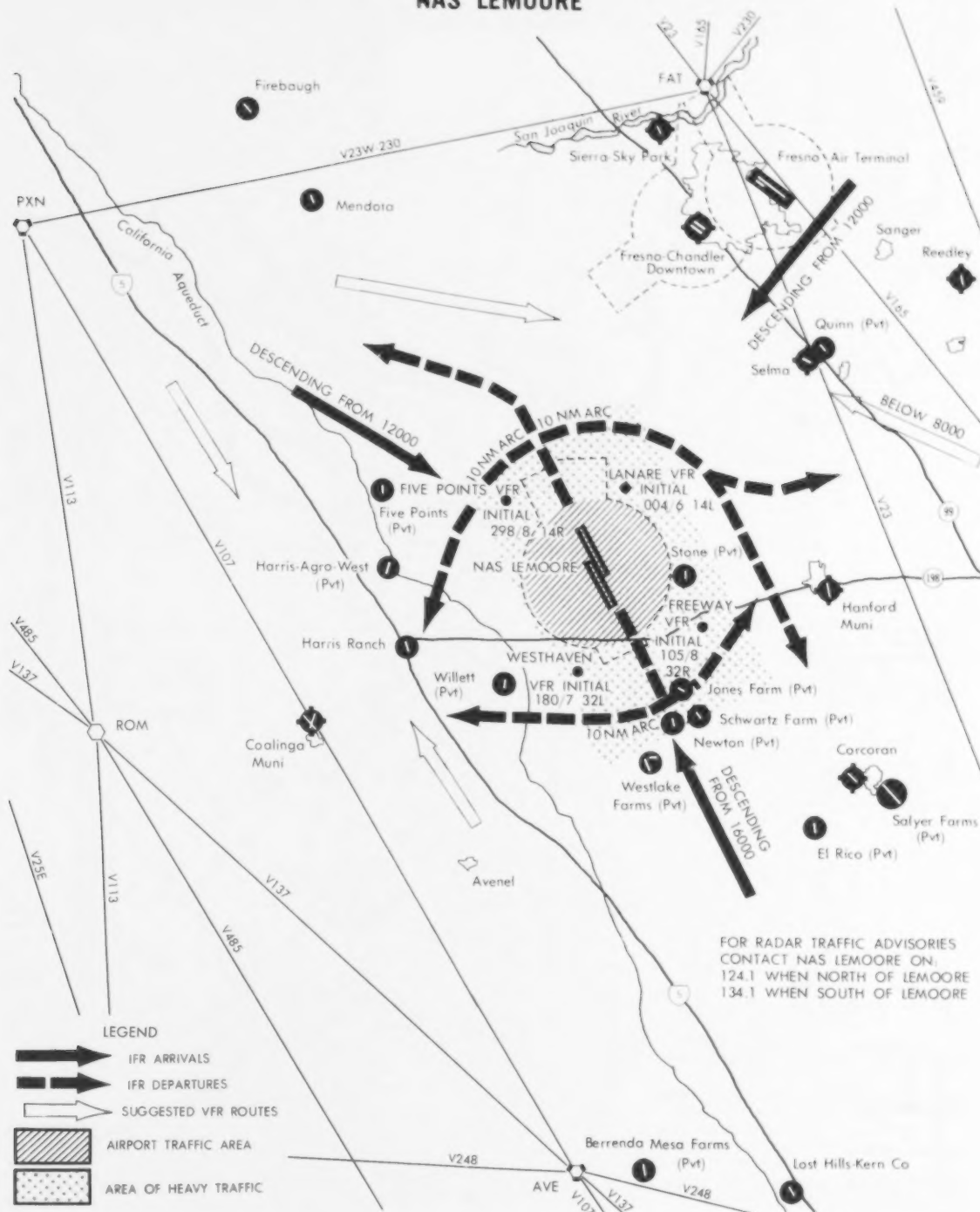
Prepared by the National Ocean Survey
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FEDERAL AVIATION ADMINISTRATION

TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term-35

Prepared by the National Ocean Survey
at the direction of the
FEDERAL AVIATION ADMINISTRATION

LEMOORE, CALIFORNIA
NAS LEMOORE

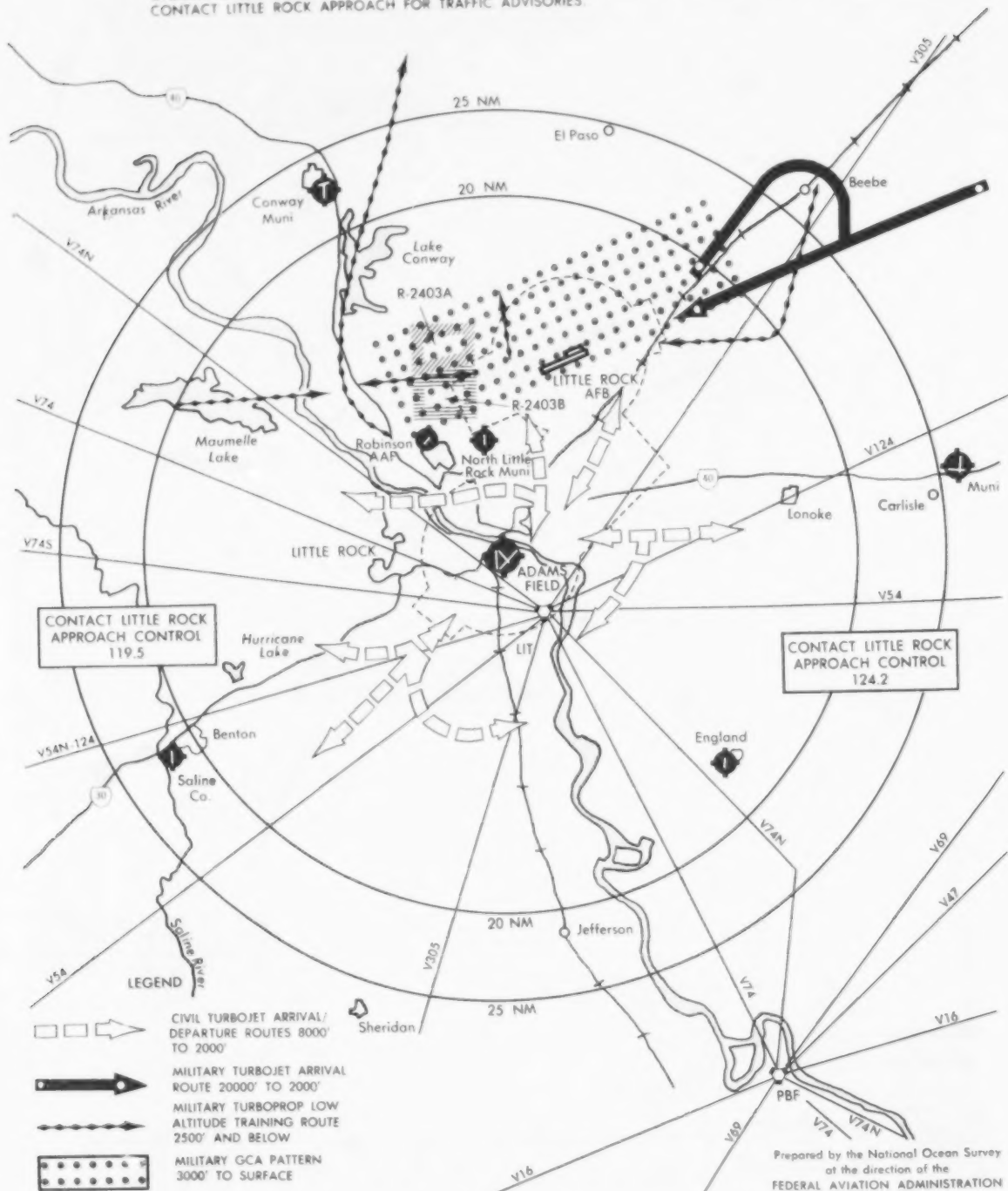


14 DEC 1981

TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

LITTLE ROCK ADAMS FIELD/AFB, ARKANSAS

THIS CHART SHOWS AREAS OF IFR TRAFFIC FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR IN THE LITTLE ROCK AREA. PILOTS OPERATING HEREIN ARE ENCOURAGED TO CONTACT LITTLE ROCK APPROACH FOR TRAFFIC ADVISORIES.

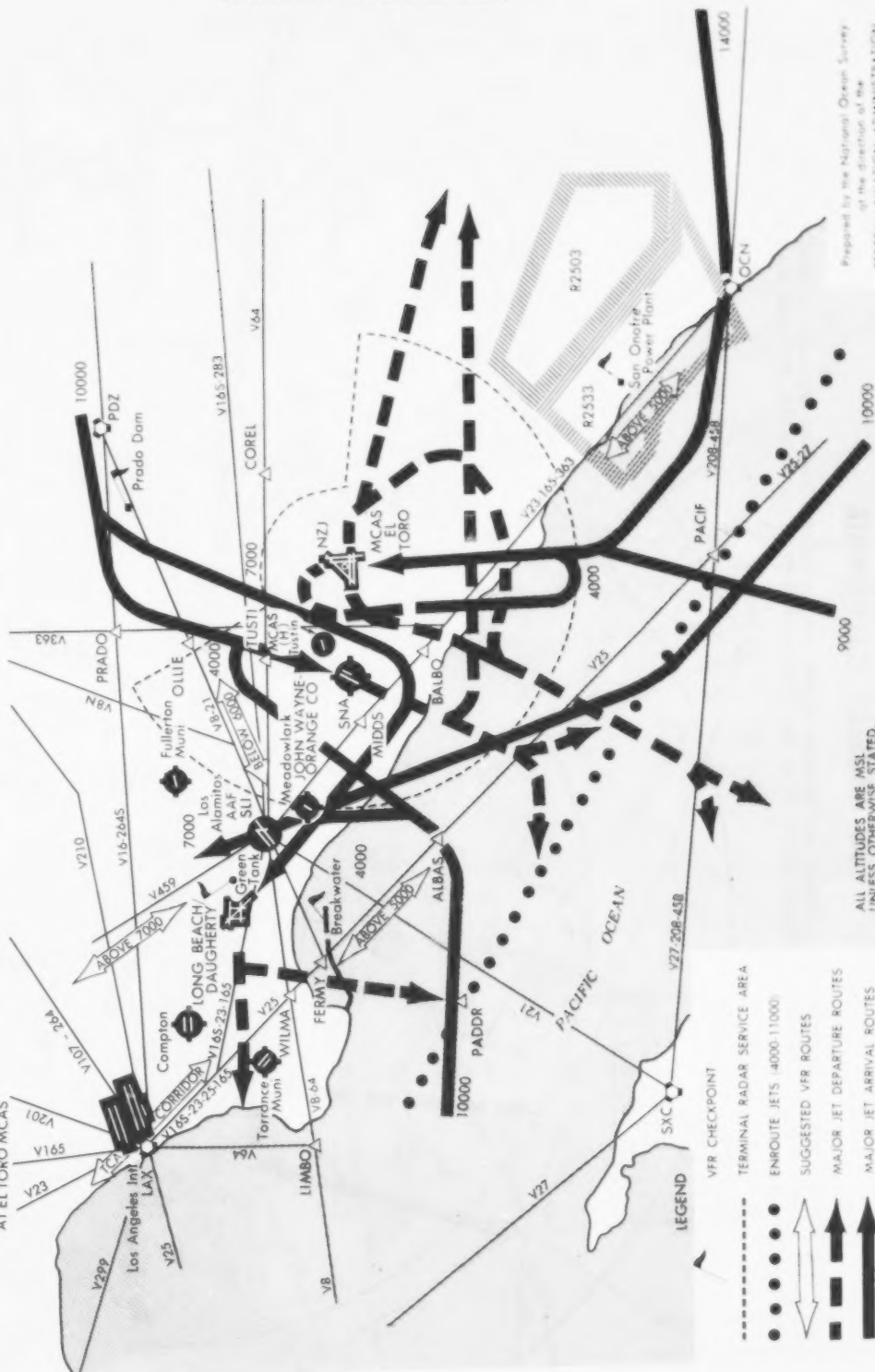


TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

Term-47

LONG BEACH, CALIFORNIA DAUGHERTY-JOHN WAYNE-ORANGE COUNTY-EL TORO

THIS CHART, DEPICTING THE IFR ROUTES WITHIN THE COAST APPROACH CONTROL AIRSPACE, IS TO ASSIST PILOTS IN PLANNING FLIGHTS INTO, AND THROUGH THE AREA. STAGE II SERVICE TO LONG BEACH AIRPORT, AND TRAFFIC ADVISORY SERVICE IS AVAILABLE ON THE FOLLOWING FREQUENCIES: NORTH AND EAST OF SEAL BEACH VOR-121.3, SOUTH 124.65, WEST-127.2, SOUTH EAST OF SANTA ANA VOR-124.1. STAGE III SERVICE IS AVAILABLE AT EL TORO MCAS.

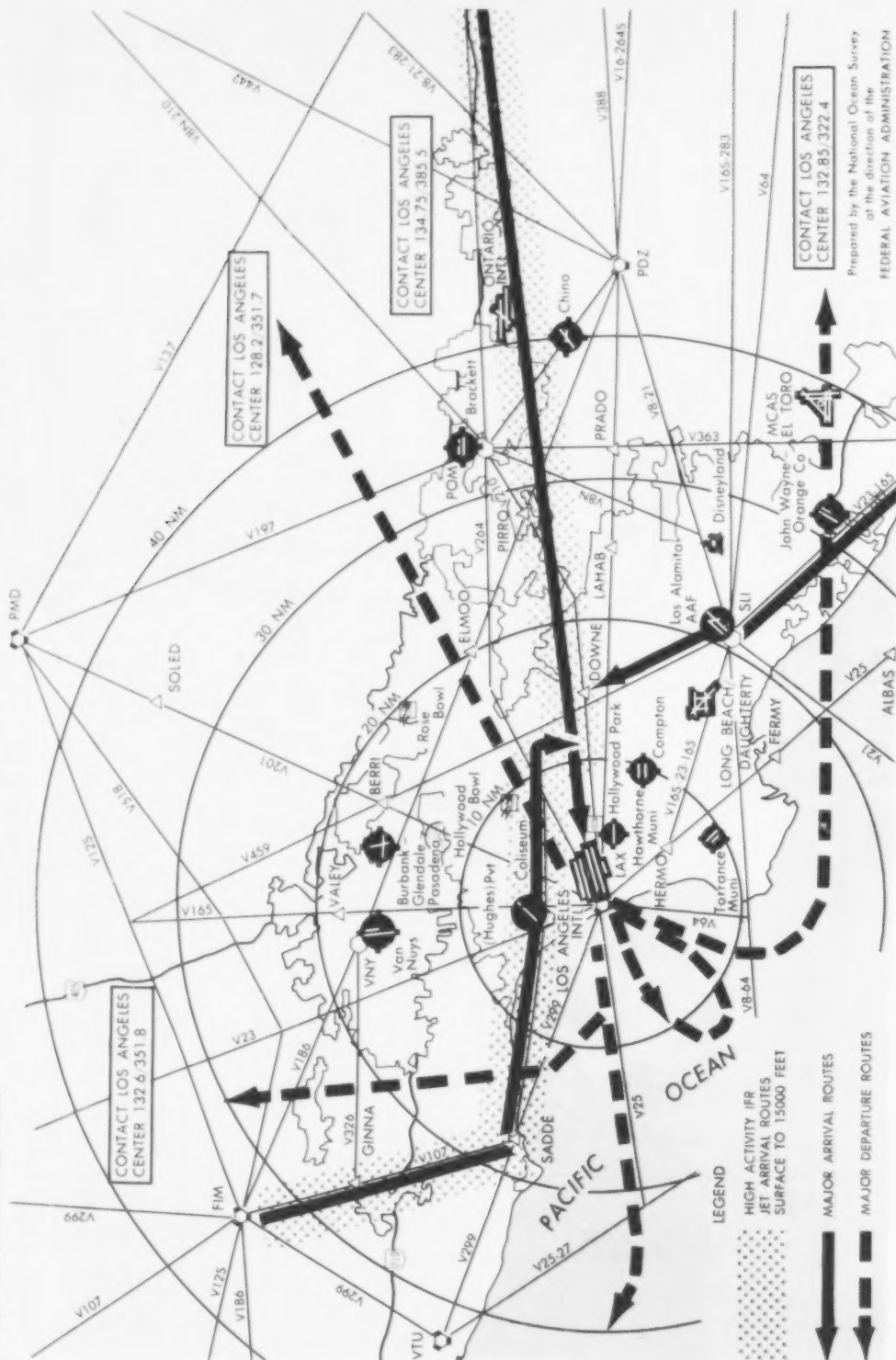


26 NOV 1981

TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

LOS ANGELES, CALIFORNIA

THIS GRAPHIC DEPICTS AREAS OF CONCENTRATED IFR ARRIVAL AND DEPARTURE TRAFFIC FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR IN THE LOS ANGELES TERMINAL AREA AND ADJACENT LOCATIONS. SHADED AREAS DEPICT HIGH ACTIVITY IFR JET ARRIVAL ROUTES. PILOTS ARE ADVISED TO EXERCISE CAUTION WHEN TRANSITING THESE AREAS.

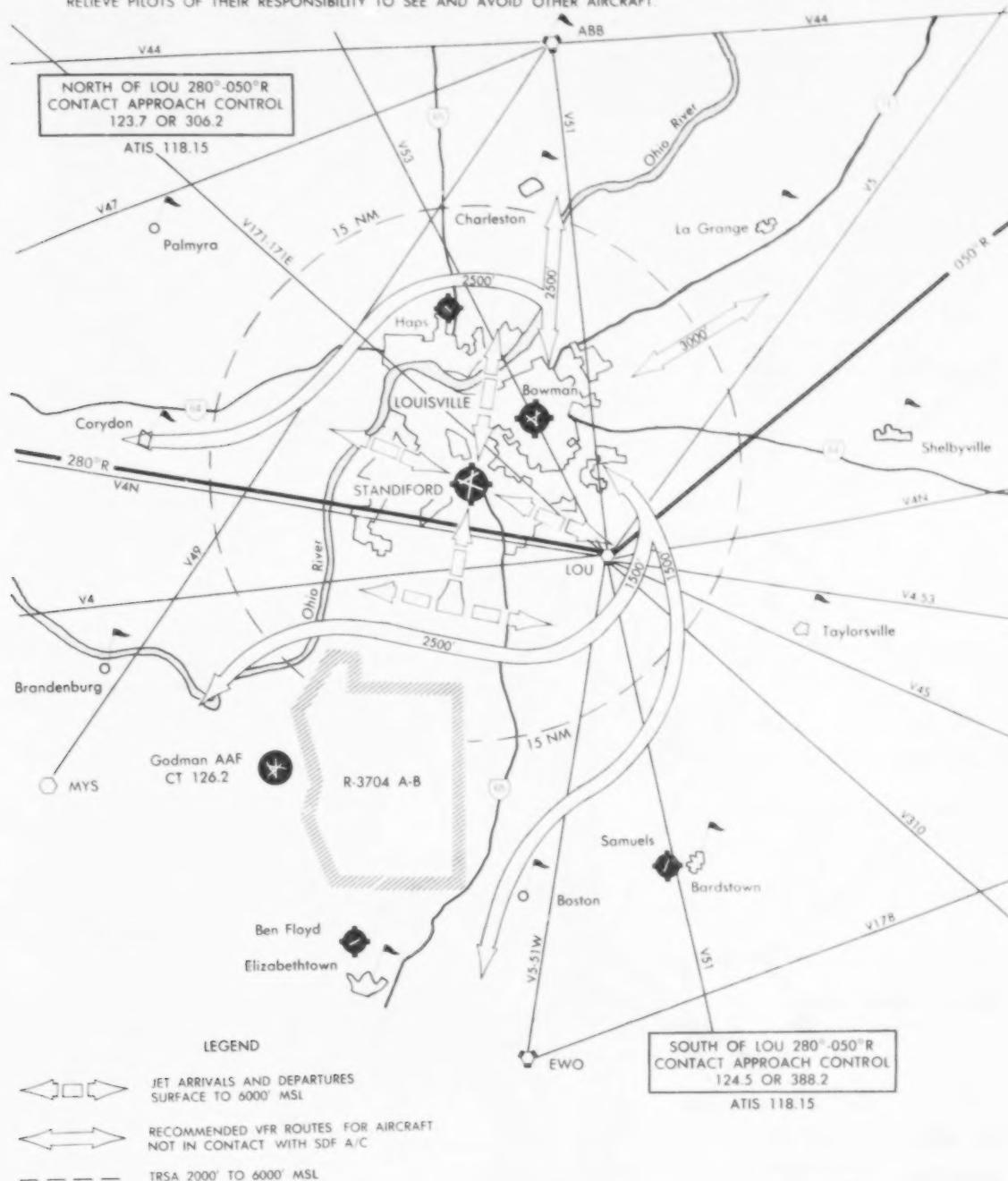


TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term-389

LOUISVILLE, KENTUCKY

THIS CHART SHOWS THE PRINCIPAL IFR JET TRAFFIC ROUTES. VFR PILOTS OPERATING IN THIS AREA ARE STRONGLY ENCOURAGED TO CONTACT STANDIFORD APPROACH CONTROL FOR TRAFFIC ADVISORIES. THIS SERVICE DOES NOT RELIEVE PILOTS OF THEIR RESPONSIBILITY TO SEE AND AVOID OTHER AIRCRAFT.



Term-41

MIAMI, FLORIDA

A-291A

A-291B

LEGEND

- PROHIBITED OR ALERT AREA
- ENCOMPASSES AREA OF HIGH DENSITY VFR ACTIVITY
- AIRPORT TRAFFIC AREA, CONTACT THE APPROPRIATE CONTROL TOWER IN ACCORDANCE WITH FAR 91.87
- IFR APPROACH/DEPARTURE CORRIDORS

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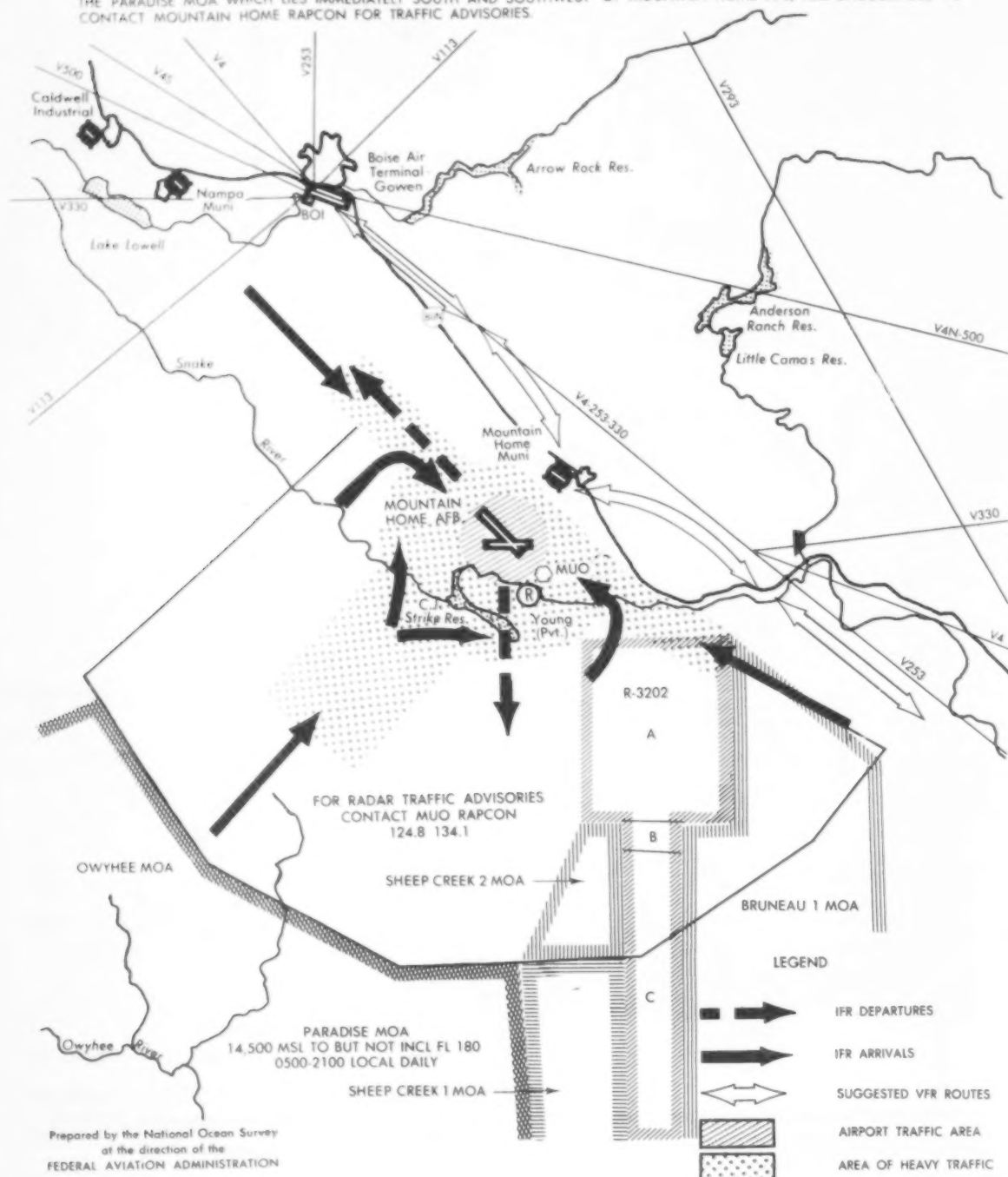
Prepared by the National Ocean Survey
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FEDERAL AVIATION ADMINISTRATION

26 NOV 1981

TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

MOUNTAIN HOME AFB, IDAHO

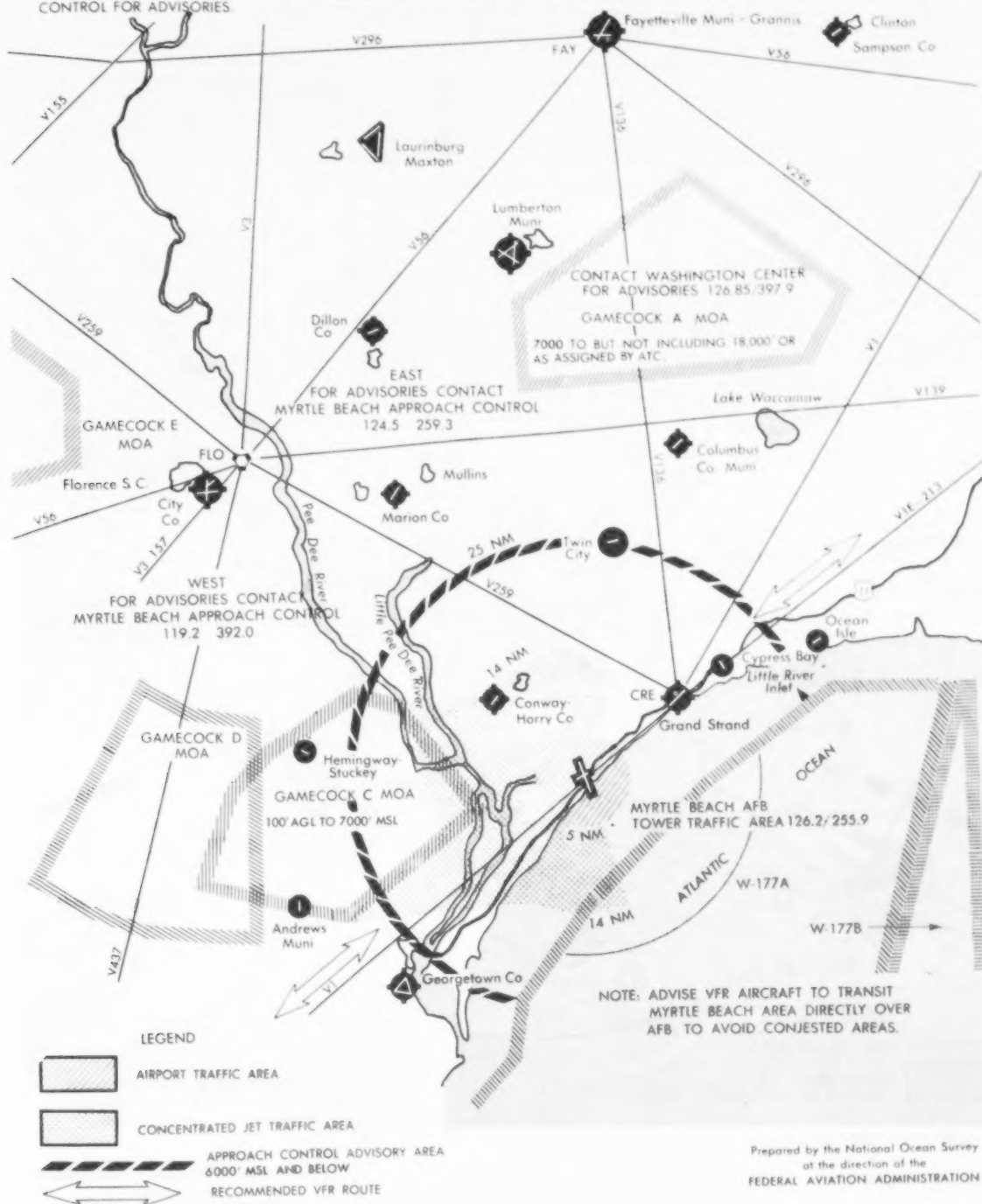
THIS CHART DEPICTS THE IFR ARRIVAL/DEPARTURE CORRIDORS SERVING MOUNTAIN HOME AFB FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR WITHIN THE AREA. PILOTS OPERATING WITHIN THIS AREA, OR PROPOSING TO TRANSIT THE PARADISE MOA WHICH LIES IMMEDIATELY SOUTH AND SOUTHWEST OF MOUNTAIN HOME AFB, ARE ENCOURAGED TO CONTACT MOUNTAIN HOME RAPCON FOR TRAFFIC ADVISORIES.



TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

MYRTLE BEACH AFB, SOUTH CAROLINA

THIS CHART SHOWS AREAS OF CONCENTRATED MILITARY JET TRAFFIC OPERATING IN THE VICINITY OF MYRTLE BEACH AFB, SOUTH CAROLINA. VFR PILOTS TRANSITING OR OPERATING WITHIN THE AREA ARE ENCOURAGED TO CONTACT MYRTLE BEACH APPROACH CONTROL FOR ADVISORIES.



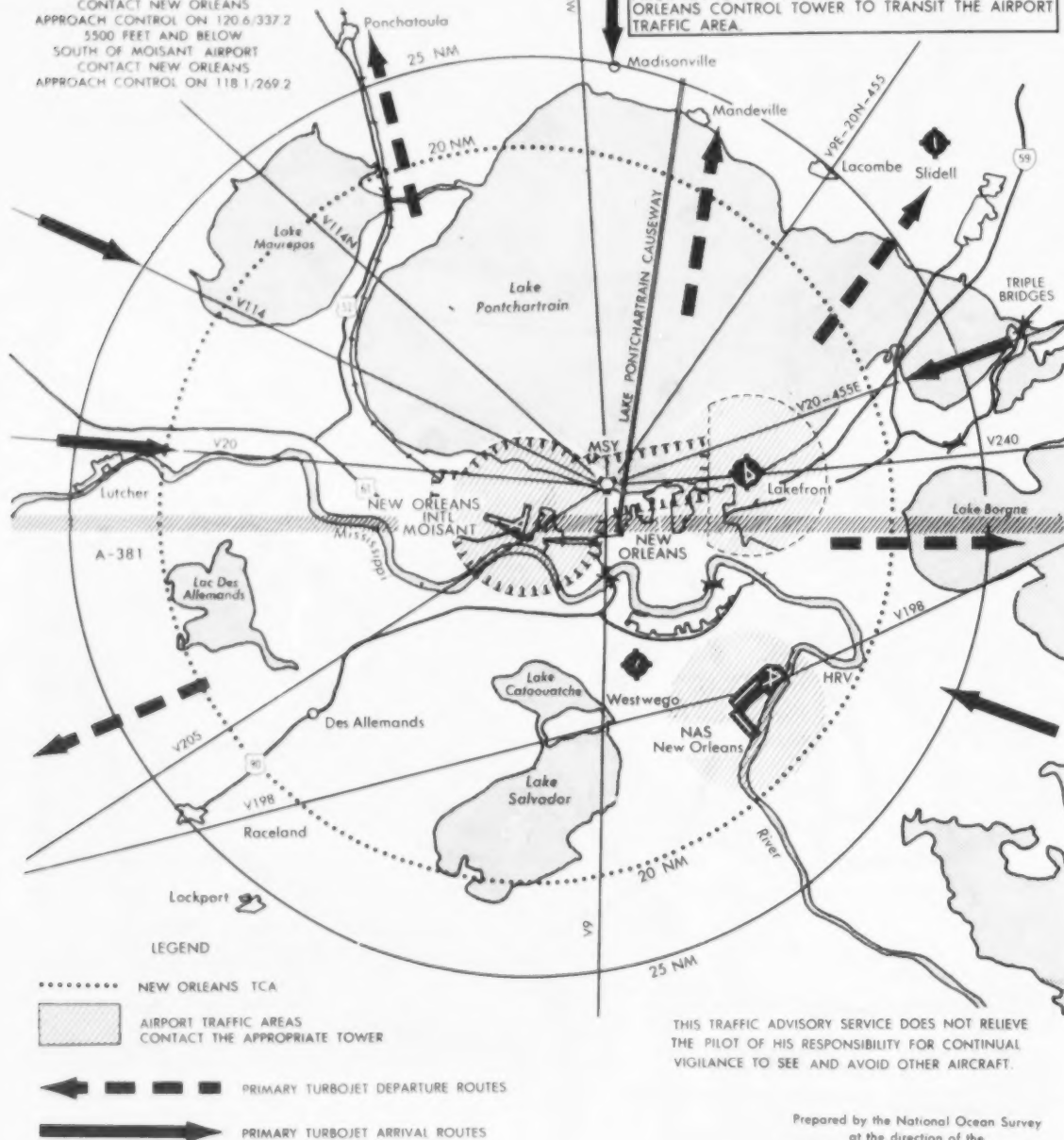
TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

NEW ORLEANS, LOUISIANA

THIS CHART SHOWS AREAS OF CONCENTRATED IFR TRAFFIC FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR IN THE NEW ORLEANS TERMINAL AREA. VFR PILOTS INTENDING TO OPERATE WITHIN THIS AREA ARE ENCOURAGED TO CONTACT NEW ORLEANS RADAR.

ABOVE 5500 FEET
CONTACT NEW ORLEANS
APPROACH CONTROL ON 125.5/284.7
5500 FEET AND BELOW
NORTH OF MOISANT AIRPORT
CONTACT NEW ORLEANS
APPROACH CONTROL ON 120.6/337.2
5500 FEET AND BELOW
SOUTH OF MOISANT AIRPORT
CONTACT NEW ORLEANS
APPROACH CONTROL ON 118.1/269.2

VFR CORRIDOR
WHEN TRANSITING THE CORRIDOR OVERLYING NEW ORLEANS INTERNATIONAL AIRPORT - MOISANT FIELD AT OR ABOVE 1000 FEET AND BELOW 2000 FEET, PRIOR APPROVAL MUST BE OBTAINED FROM NEW ORLEANS CONTROL TOWER TO TRANSIT THE AIRPORT TRAFFIC AREA.



TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

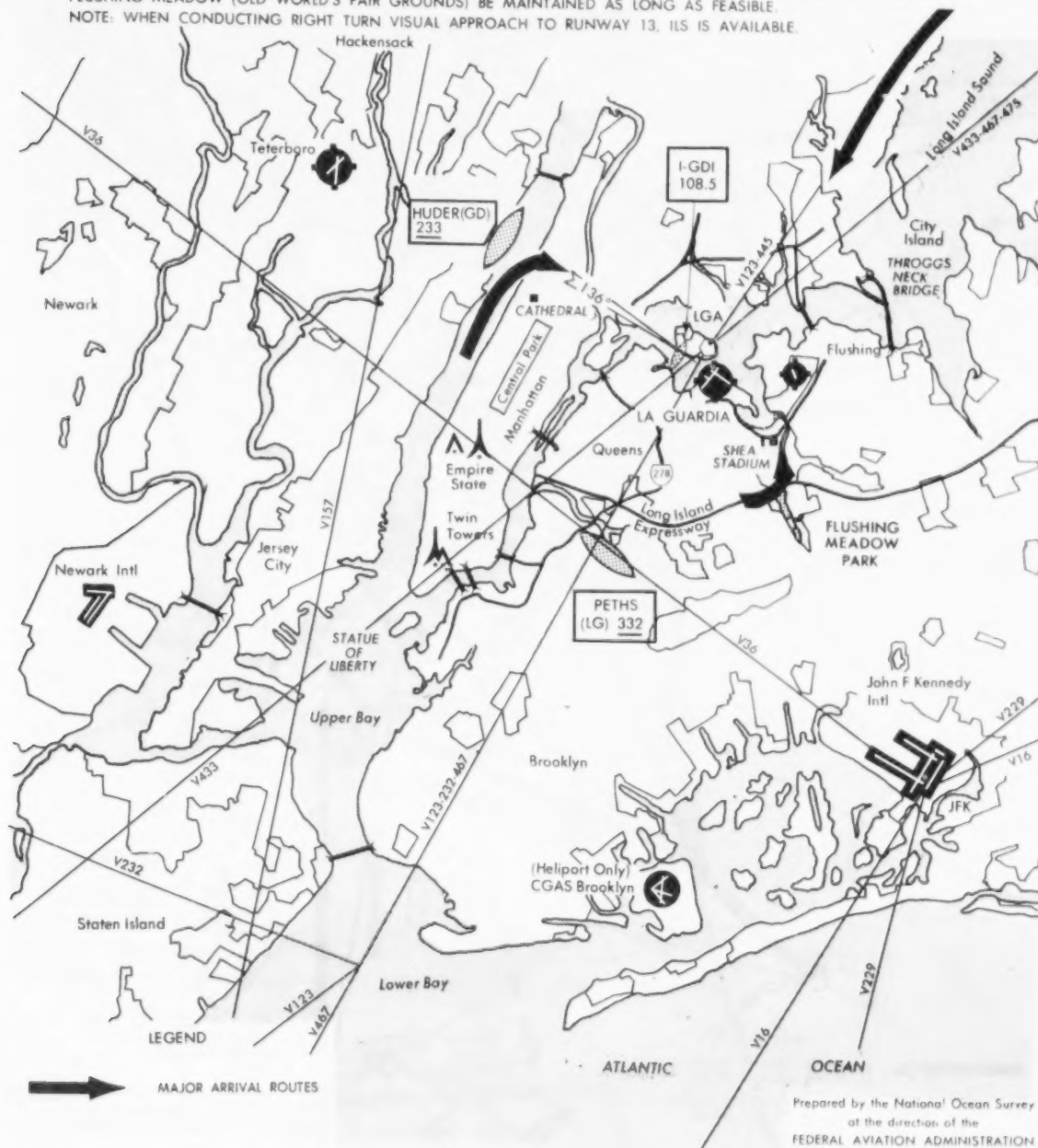
Term-45

NEW YORK, NY LA GUARDIA AIRPORT

THIS CHART HAS BEEN DEVELOPED TO AID PILOTS CONDUCTING VISUAL APPROACHES TO LA GUARDIA AIRPORT.

1. WHEN CONDUCTING VISUAL APPROACHES IT IS DESIRABLE THAT THE HIGHEST ALTITUDE PRACTICABLE IS MAINTAINED UNTIL DESCENT FOR LANDING IS BEGUN. 2. WHEN APPROACHING FROM THE NORTHEAST (LONG ISLAND SOUND) FLIGHT OVER THE OPEN WATER AREAS SHOULD BE MAINTAINED AS LONG AS POSSIBLE. ADHERENCE TO THE VOR TRACK IS ESSENTIAL TO MEET THE OBJECTIVES OF NOISE ABATEMENT WHEN THE VOR APPROACH IS BEING USED. 3. WHEN APPROACHING TO LAND ON RUNWAY 31, IT IS SUGGESTED THAT A FLIGHT PATH OVER THE FLUSHING MEADOW (OLD WORLD'S FAIR GROUNDS) BE MAINTAINED AS LONG AS FEASIBLE.

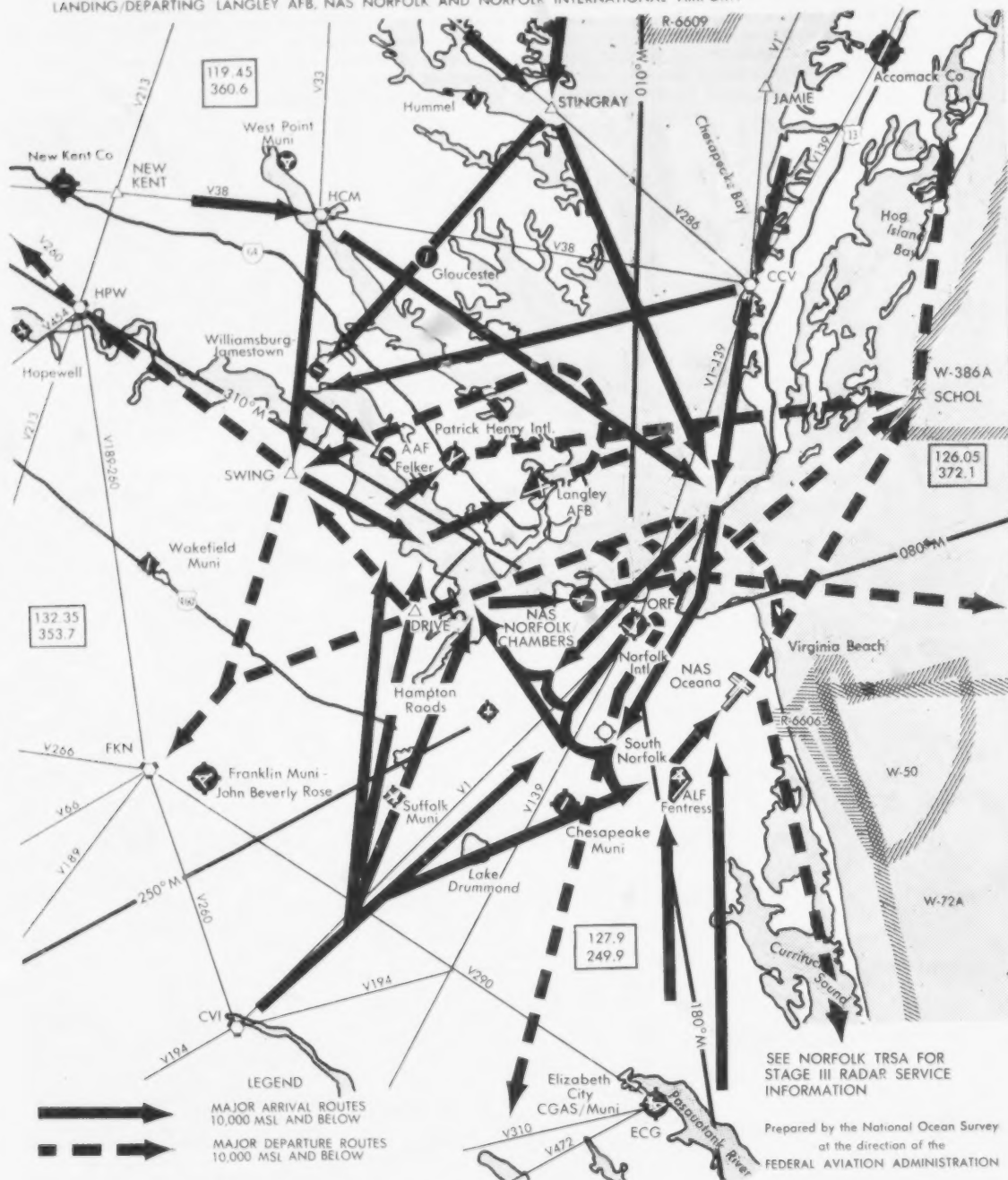
NOTE: WHEN CONDUCTING RIGHT TURN VISUAL APPROACH TO RUNWAY 13, ILS IS AVAILABLE.



TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

NORFOLK, VIRGINIA

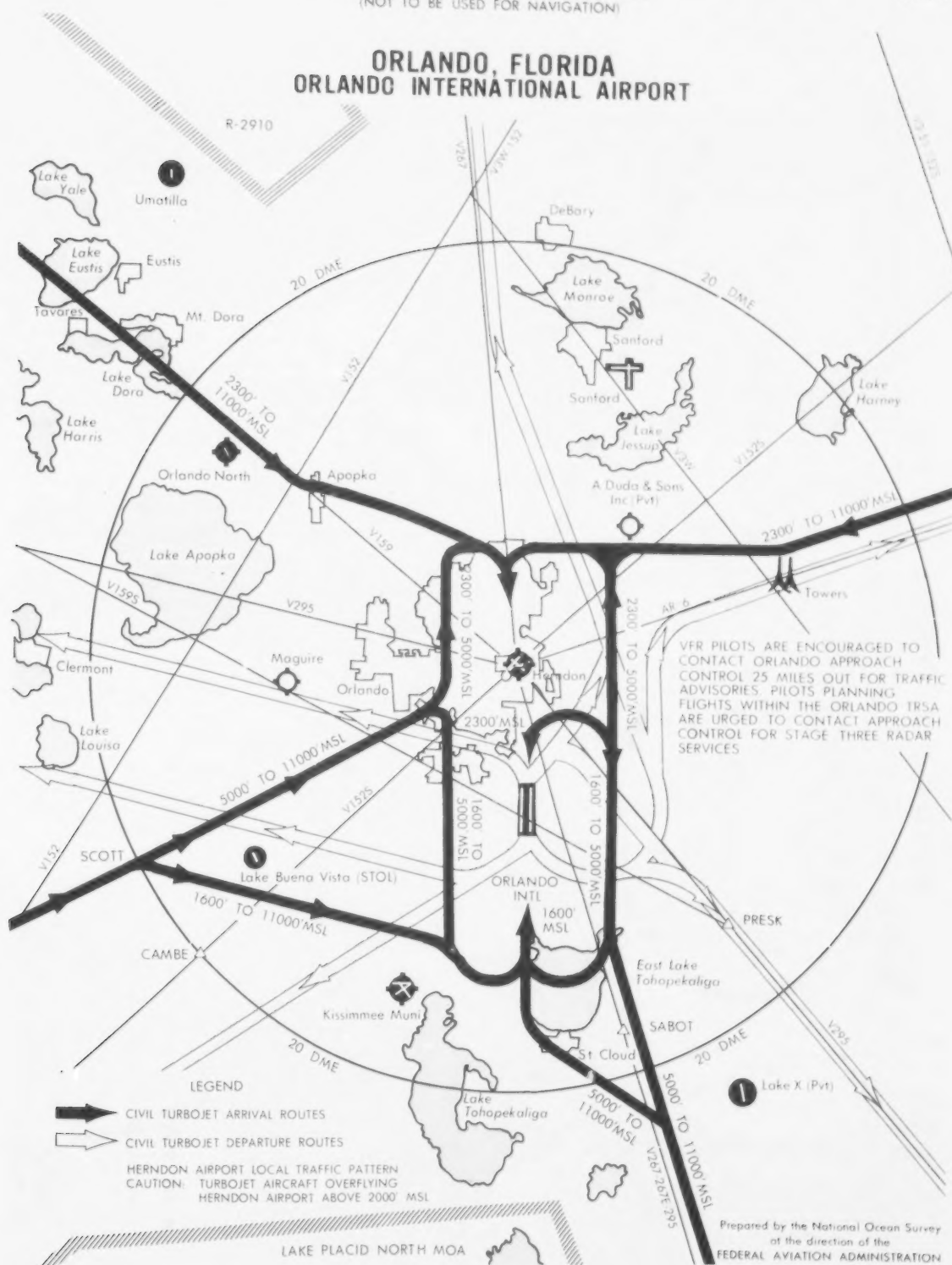
THIS CHART SHOWS AREAS OF CONCENTRATED IFR TRAFFIC FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR WITHIN THE NORFOLK TERMINAL AREA. PILOTS INTENDING TO OPERATE VFR WITHIN THE AREA ARE ENCOURAGED TO CONTACT NORFOLK APPROACH CONTROL. THIS TRAFFIC ADVISORY DOES NOT RELIEVE THE PILOTS OF THEIR RESPONSIBILITY FOR CONTINUAL VIGILANCE TO SEE AND AVOID OTHER AIRCRAFT. STAGE III RADAR SERVICE IS AVAILABLE FOR VFR AIRCRAFT LANDING/DEPARTING LANGLEY AFB, NAS NORFOLK AND NORFOLK INTERNATIONAL AIRPORT.



TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term-47

ORLANDO, FLORIDA
ORLANDO INTERNATIONAL AIRPORT



VFR PILOTS ARE ENCOURAGED TO CONTACT ORLANDO APPROACH CONTROL 25 MILES OUT FOR TRAFFIC ADVISORIES. PILOTS PLANNING FLIGHTS WITHIN THE ORLANDO TRSA ARE URGED TO CONTACT APPROACH CONTROL FOR STAGE THREE RADAR SERVICES.

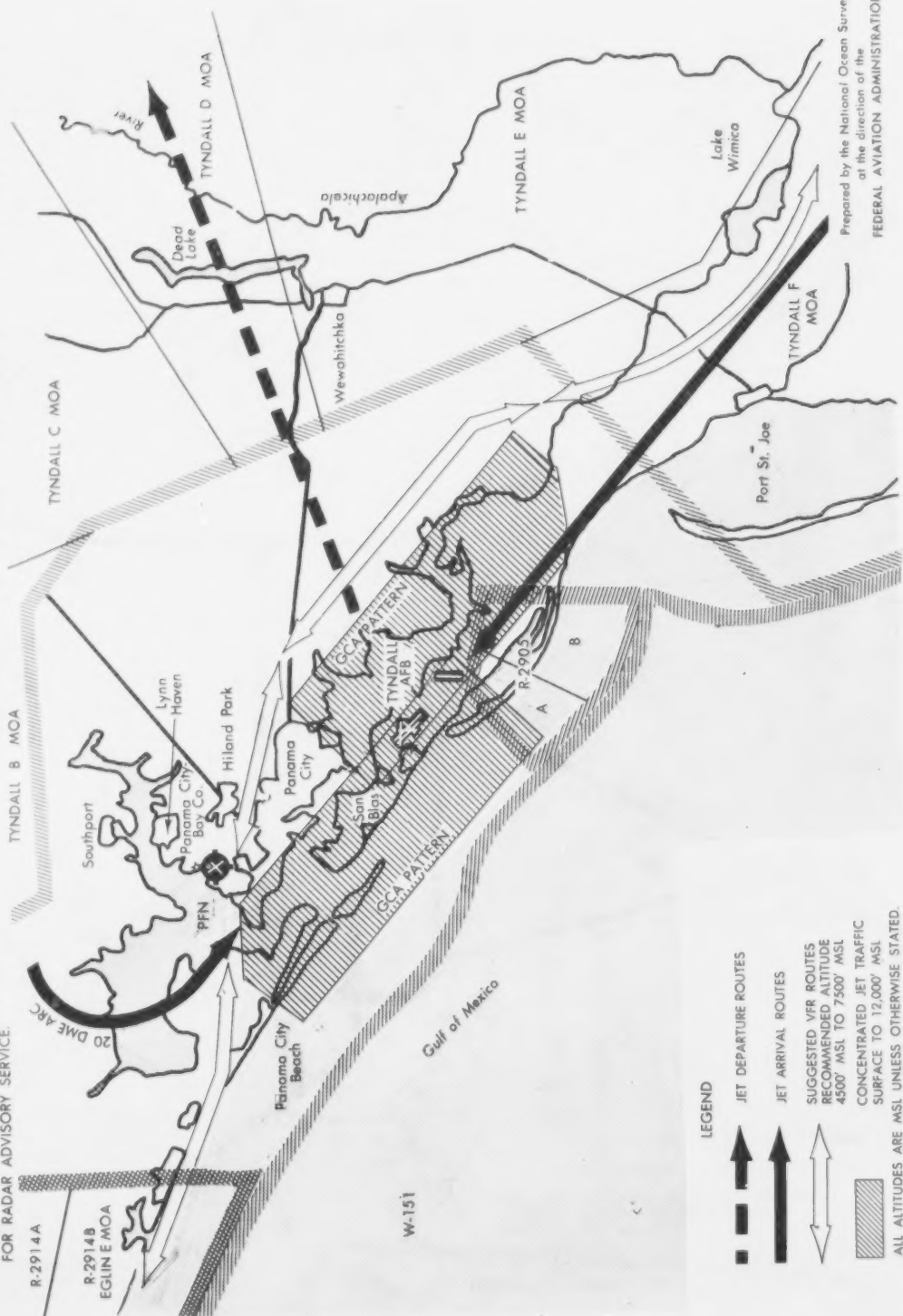
- LEGEND
- CIVIL TURBOJET ARRIVAL ROUTES
 - CIVIL TURBOJET DEPARTURE ROUTES
 - HERNDON AIRPORT LOCAL TRAFFIC PATTERN
 - CAUTION: TURBOJET AIRCRAFT OVERFLYING HERNDON AIRPORT ABOVE 2000' MSL

Prepared by the National Ocean Survey
at the direction of the
FEDERAL AVIATION ADMINISTRATION

TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

PANAMA CITY, TYNDALL AFB, FLA.

THIS CHART SHOWS AREAS OF CONCENTRATED MILITARY JET AIRCRAFT TRAFFIC OPERATING IN VICINITY OF TYNDALL AFB, FLA. MANED UNMANNED DRONE OPERATIONS ARE CONDUCTED FROM SATELLITE DRONE RUNWAY 18/36 LOCATED 3.0 STATUTE MILES S.E. OF MAIN AIRFIELD DURING DAYTIME HOURS. VFR AIRCRAFT OVERFLYING THE AREA OR LANDING AT PANAMA CITY AIRPORT ARE URGED TO CONTACT TYNDALL APPROACH CONTROL ON 119.1 OR 119.75 FOR RADAR ADVISORY SERVICE.



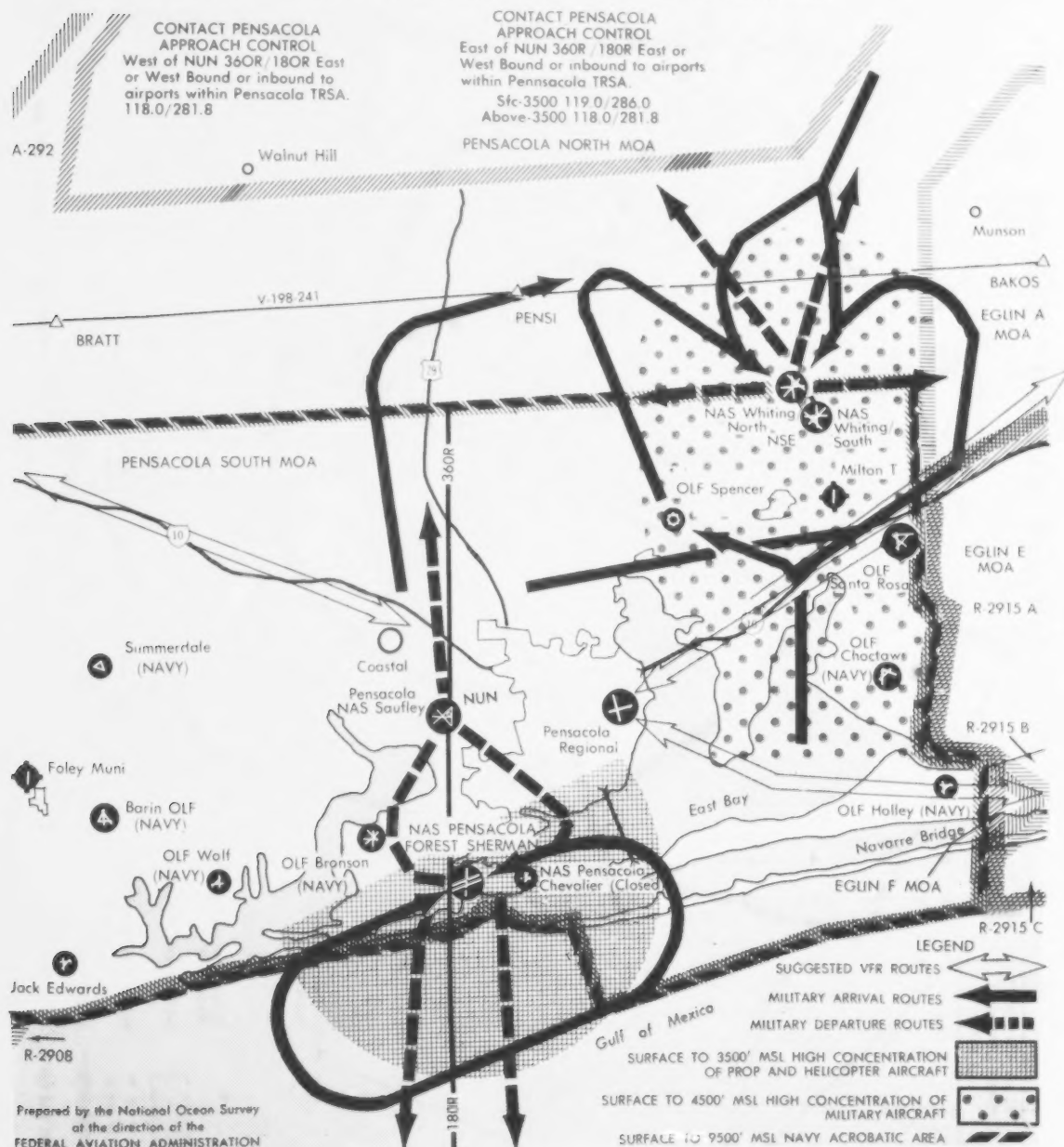
Prepared by the National Ocean Survey
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FEDERAL AVIATION ADMINISTRATION

TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term-49

PENSACOLA, FLORIDA NAS PENSACOLA-FOREST SHERMAN

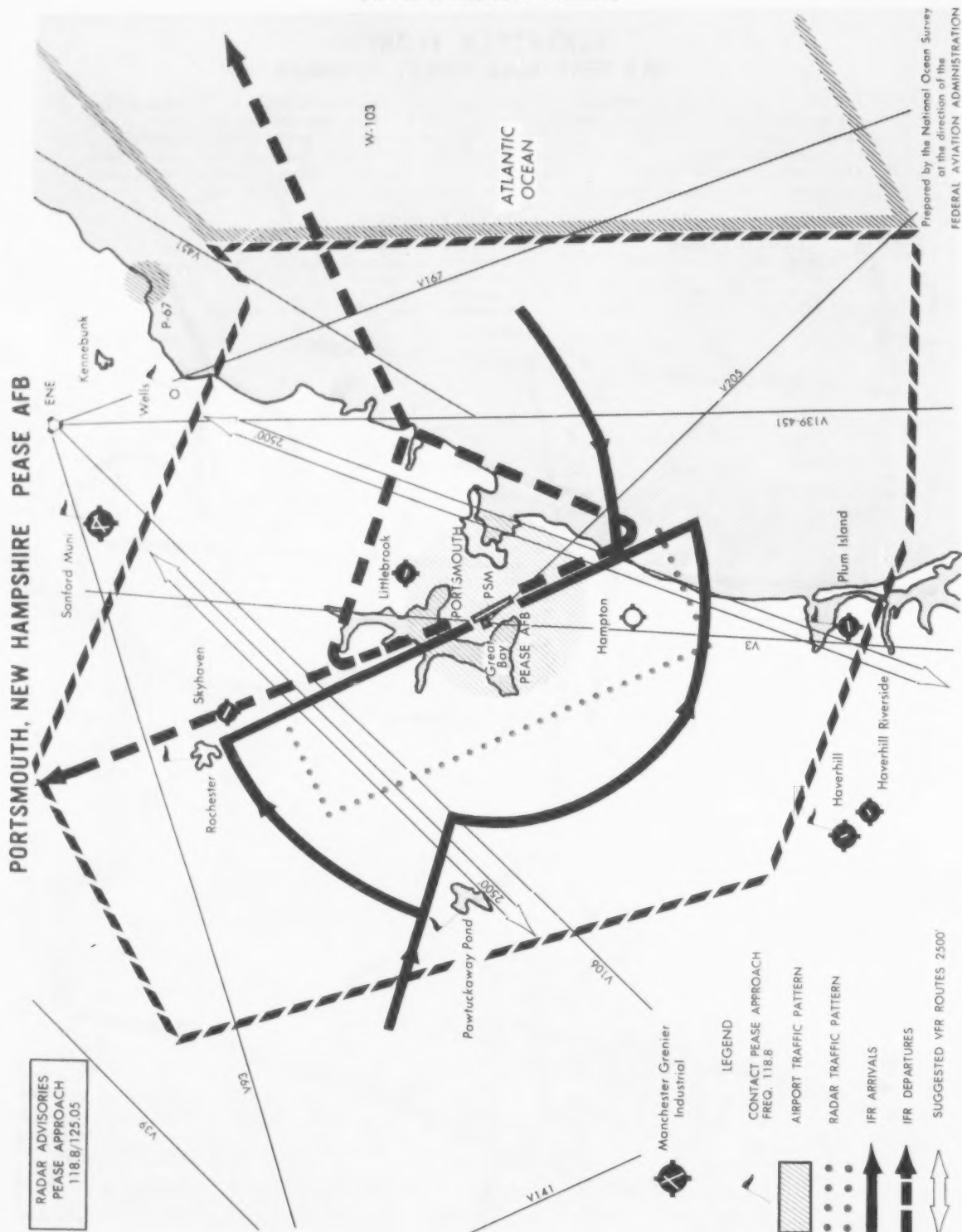
THIS GRAPHIC DEPICTS MILITARY ARRIVAL ROUTES, DEPARTURE ROUTES AND PRACTICE AREAS. DUE TO THE HIGH CONCENTRATION OF MILITARY TRAINING FLIGHTS IN THE VICINITY OF NAS WHITING AND NAS PENSACOLA VFR PILOTS ARE URGED TO UTILIZE STAGE III SERVICE PROVIDED BY PENSACOLA APPROACH CONTROL. VFR PILOTS INBOUND TO PENSACOLA FROM OVER CRESTVIEW SHOULD DEPART CRESTVIEW ON THE 235° RADIAL OR REMAIN NORTH OF INTER STATE 10 AND CONTACT APPROACH CONTROL AFTER PASSING CRESTVIEW. VFR PILOTS EASTBOUND TOWARDS CRESTVIEW SHOULD CONTACT PENSACOLA APPROACH CONTROL WEST OF THE SAUFLEY VOR.



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21 JAN 1982

TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)



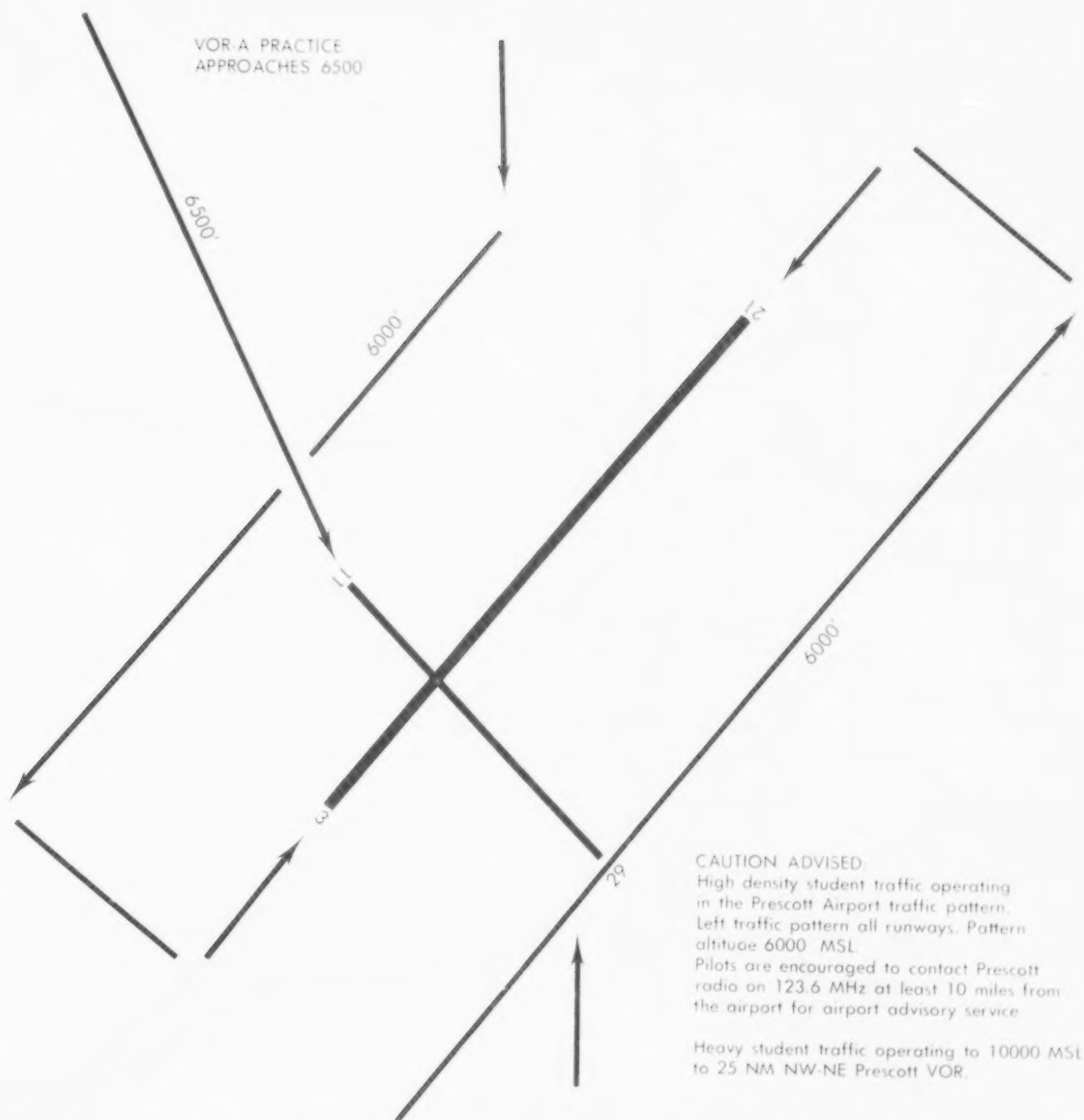
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26 NOV 1981

TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term-51

PRESCOTT, ARIZONA
LOVE FIELD



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FEDERAL AVIATION ADMINISTRATION

19 FEB 1981

TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

RENO, NEVADA

THIS GRAPHIC SHOWS THE PRINCIPAL IFR JET TRAFFIC FLOWS FOR STAGE II SERVICES. AIRCRAFT LANDING AT RENO OR STEAD MONITOR ATIS ON 125.8 25 NM OUT FOR FREQUENCY ASSIGNMENT. RADAR TRAFFIC ADVISORY SERVICE WILL BE PROVIDED VFR AIRCRAFT ON A TRAFFIC PERMITTING BASIS. THIS SERVICE DOES NOT RELIEVE PILOTS OF THEIR RESPONSIBILITY TO SEE AND AVOID OTHER AIRCRAFT. STAGE II RADAR SERVICE IS EXPLAINED IN THE AIM.



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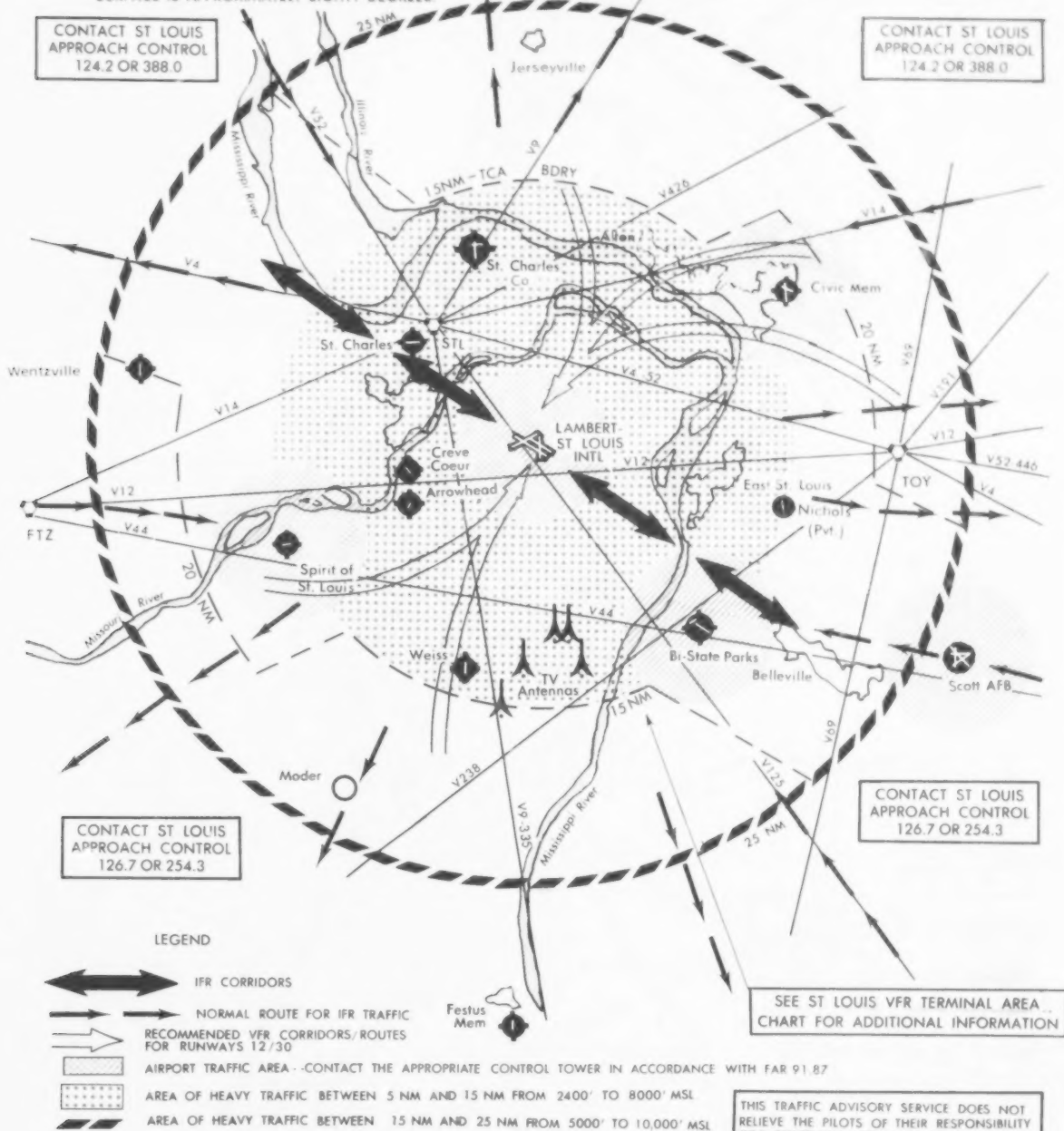
6 AUG 1981

TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

Term-53

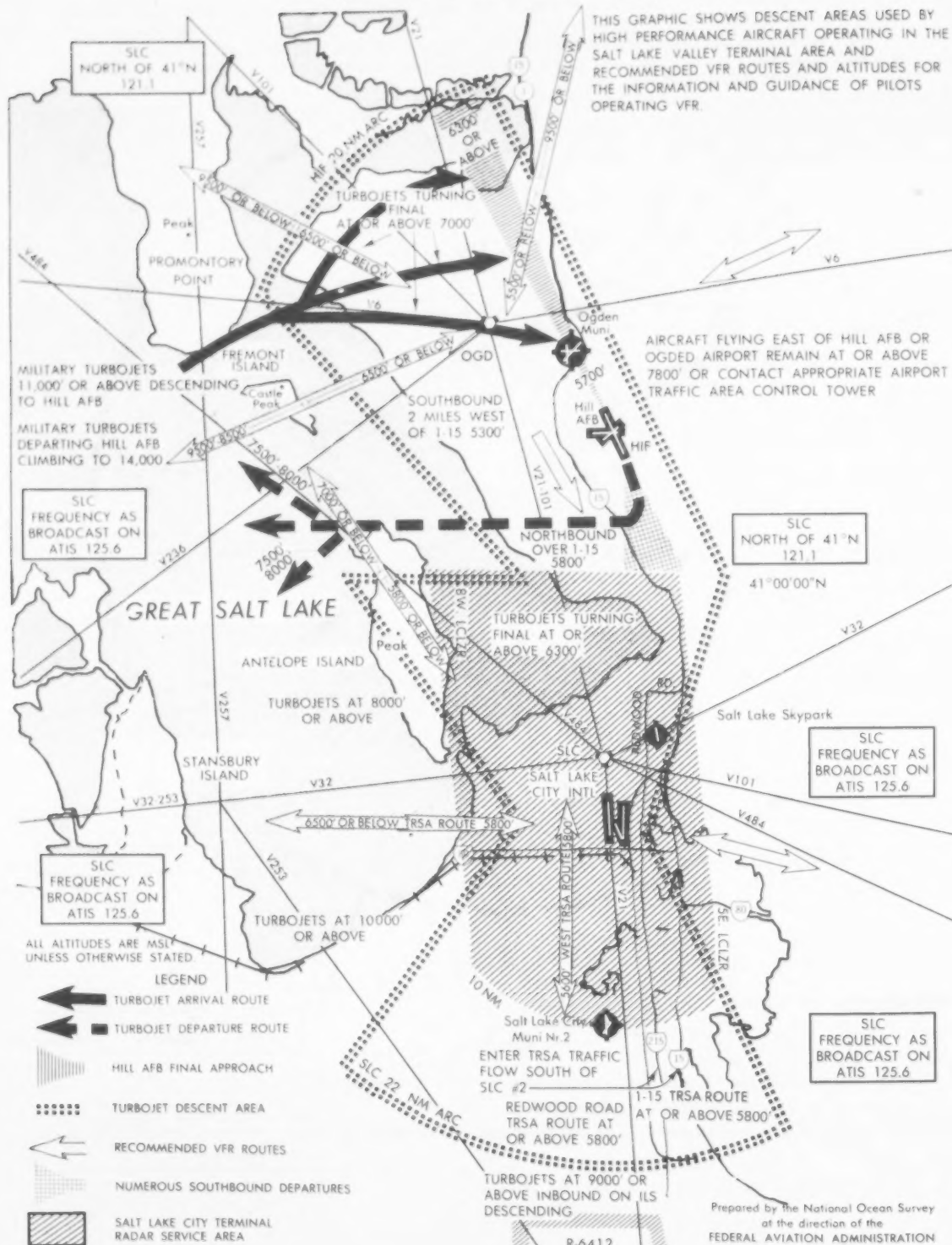
ST. LOUIS, MISSOURI

THIS MAP SHOWS AREAS OF CONCENTRATED IFR TRAFFIC FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR IN THE ST. LOUIS TERMINAL AREA. VFR PILOTS INTENDING TO OPERATE WITHIN THE AREA ARE ENCOURAGED TO CONTACT ST. LOUIS RADAR OR TO OPERATE BELOW THE ALTITUDES OCCUPIED BY IFR TRAFFIC. HIGH PERFORMANCE FIGHTER TYPE JET AIRCRAFT DEPARTING MAXIMUM CLIMB ABOVE 8000 FEET, FIVE NAUTICAL MILE RADIUS OF AIRPORT. PITCH ANGLE FROM SURFACE IS APPROXIMATELY EIGHTY DEGREES.



Term-54

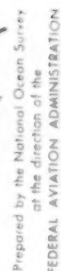
TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION) **SALT LAKE VALLEY, UTAH**



THIS GRAPHIC DEPICTS THE MAJOR AREAS OF CONCENTRATED IFR ARRIVAL AND DEPARTURE TRAFFIC FOR THE SAN DIEGO AREA.

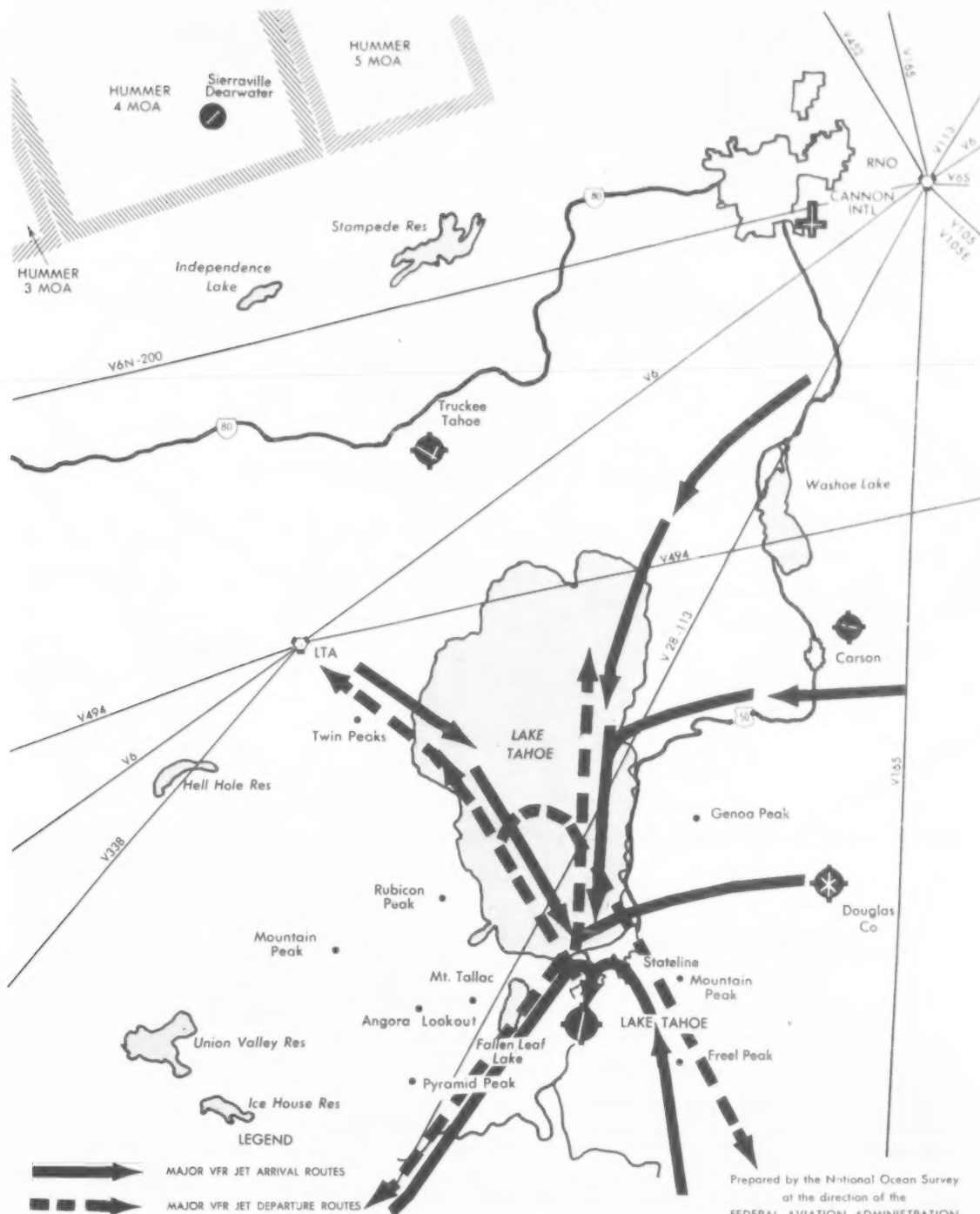
THIS GRAPHIC DEPICTS THE MAJOR AREAS OF CONCENTRATED IFR ARRIVAL AND DEPARTURE TRAFFIC FOR THE SAN DIEGO AREA.





TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)
SOUTH LAKE TAHOE, CALIFORNIA
LAKE TAHOE AIRPORT

Term-57

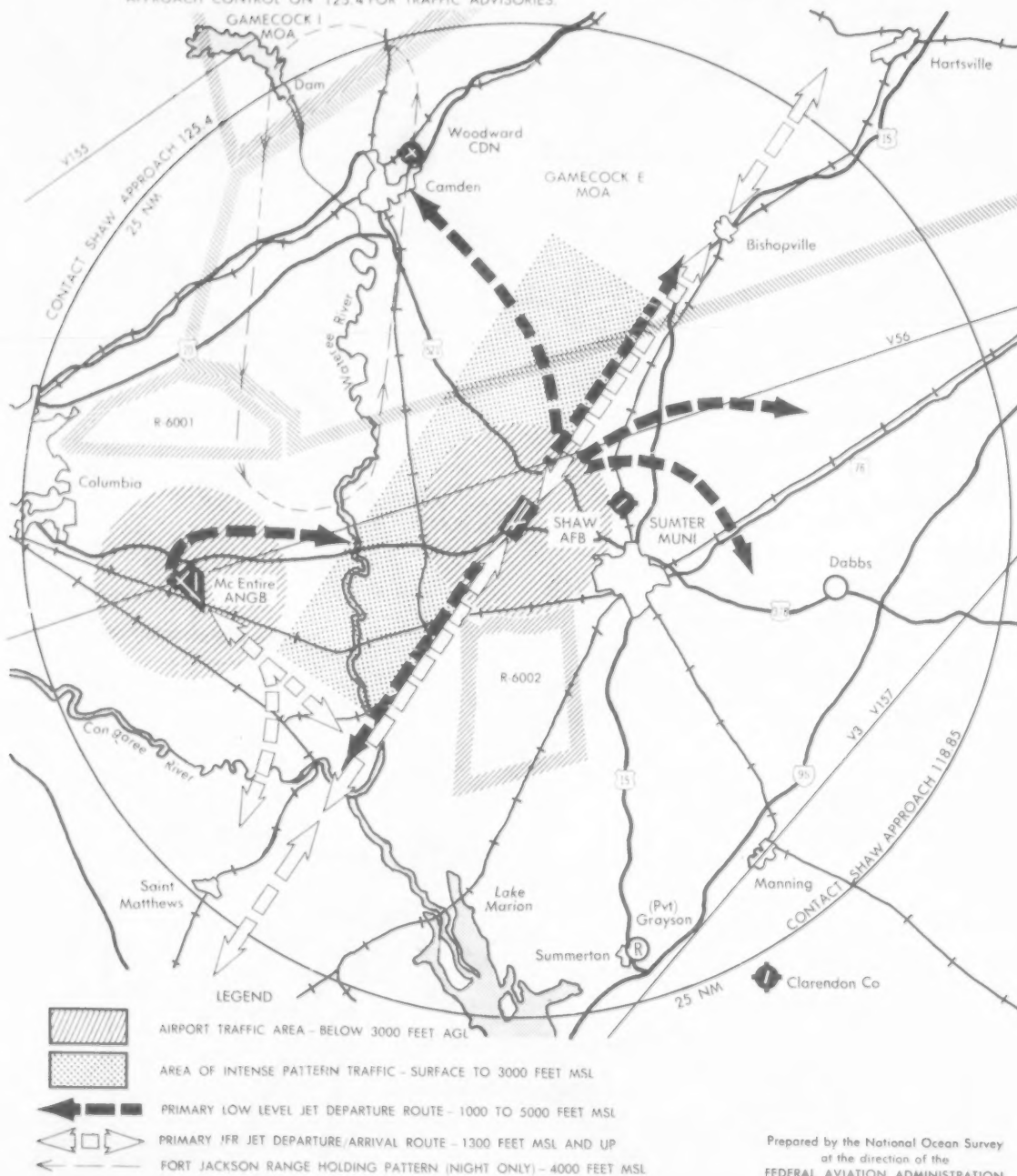


6 AUG 1981

TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

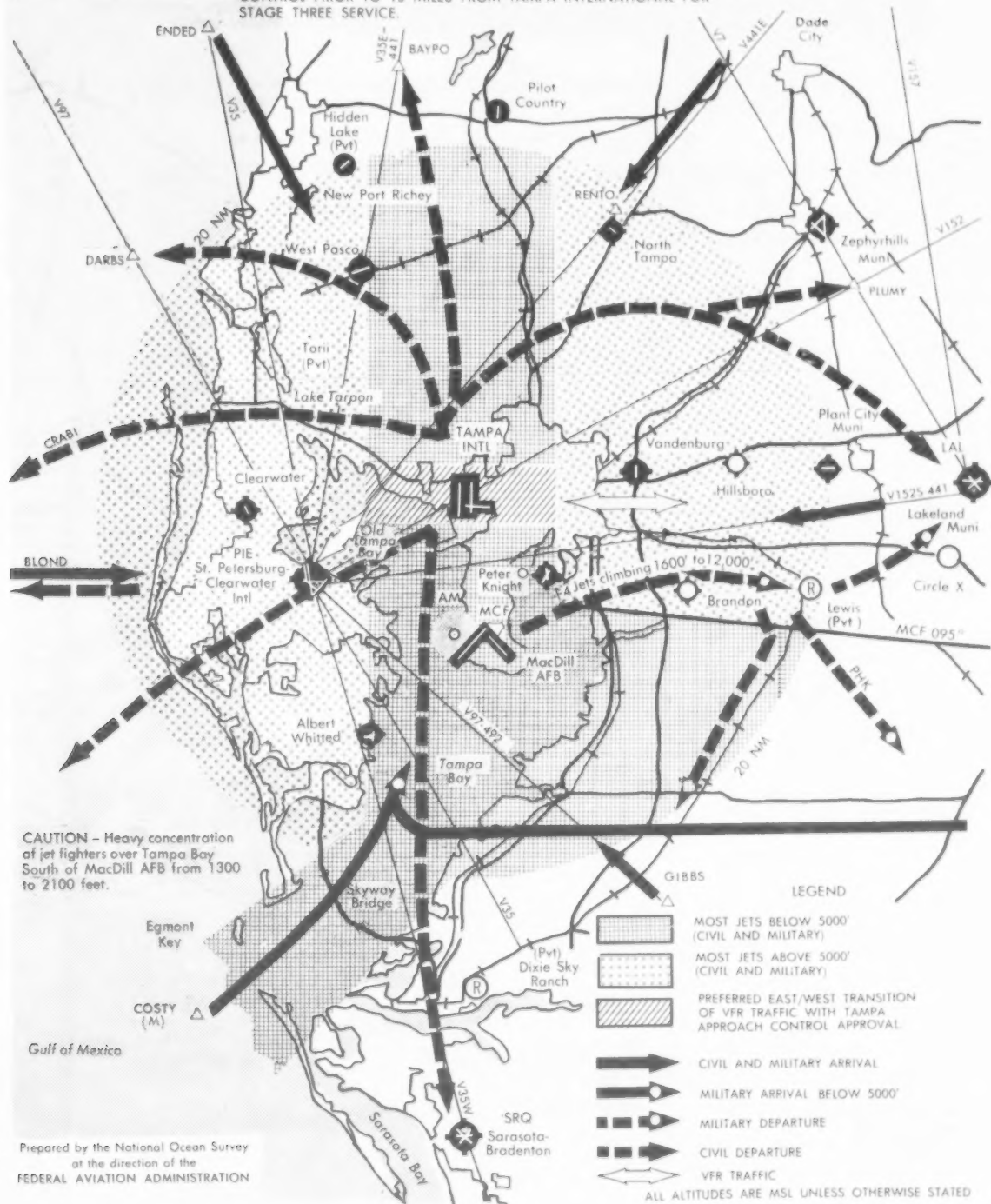
SUMTER, SHAW AFB SOUTH CAROLINA

THIS MAP SHOWS AREAS OF CONCENTRATED MILITARY JET TRAFFIC FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR IN THE SHAW TERMINAL AREA. PILOTS INTENDING TO OPERATE VFR WITHIN THE AREA AT OR BELOW 6000 FEET MSL ARE ENCOURAGED TO CONTACT SHAW APPROACH CONTROL ON 125.4 FOR TRAFFIC ADVISORIES.



Term-59

VFR AIRCRAFT ARE STRONGLY URGED TO CONTACT TAMPA APPROACH CONTROL PRIOR TO 15 MILES FROM TAMPA INTERNATIONAL FOR STAGE THREE SERVICE.



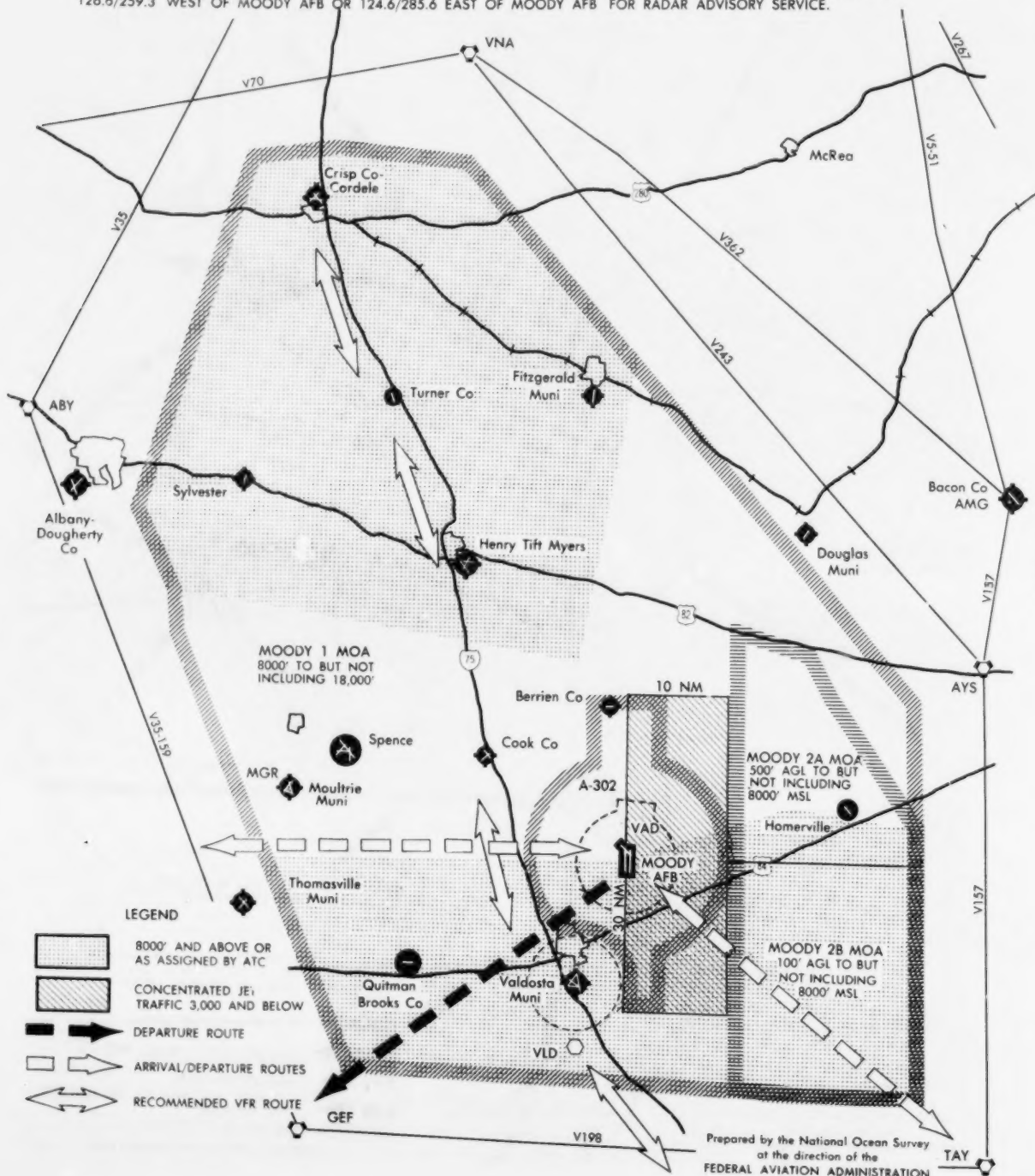
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26 NOV 1981

TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

VALDOSTA, MOODY AFB, GA.

THIS CHART SHOWS AREAS OF CONCENTRATED MILITARY JET TRAFFIC OF F-4 AIRCRAFT OPERATING IN THE VICINITY OF MOODY AFB, GEORGIA. VFR AIRCRAFT OVERFLYING THE AREA ARE URGED TO CONTACT VALDOSTA APPROACH ON 126.6/259.3 WEST OF MOODY AFB OR 124.6/285.6 EAST OF MOODY AFB FOR RADAR ADVISORY SERVICE.



TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term-61

**VALPARAISO, FLORIDA
SPECIAL AIR TRAFFIC RULES
(VFR OR IFR CONDITIONS)**

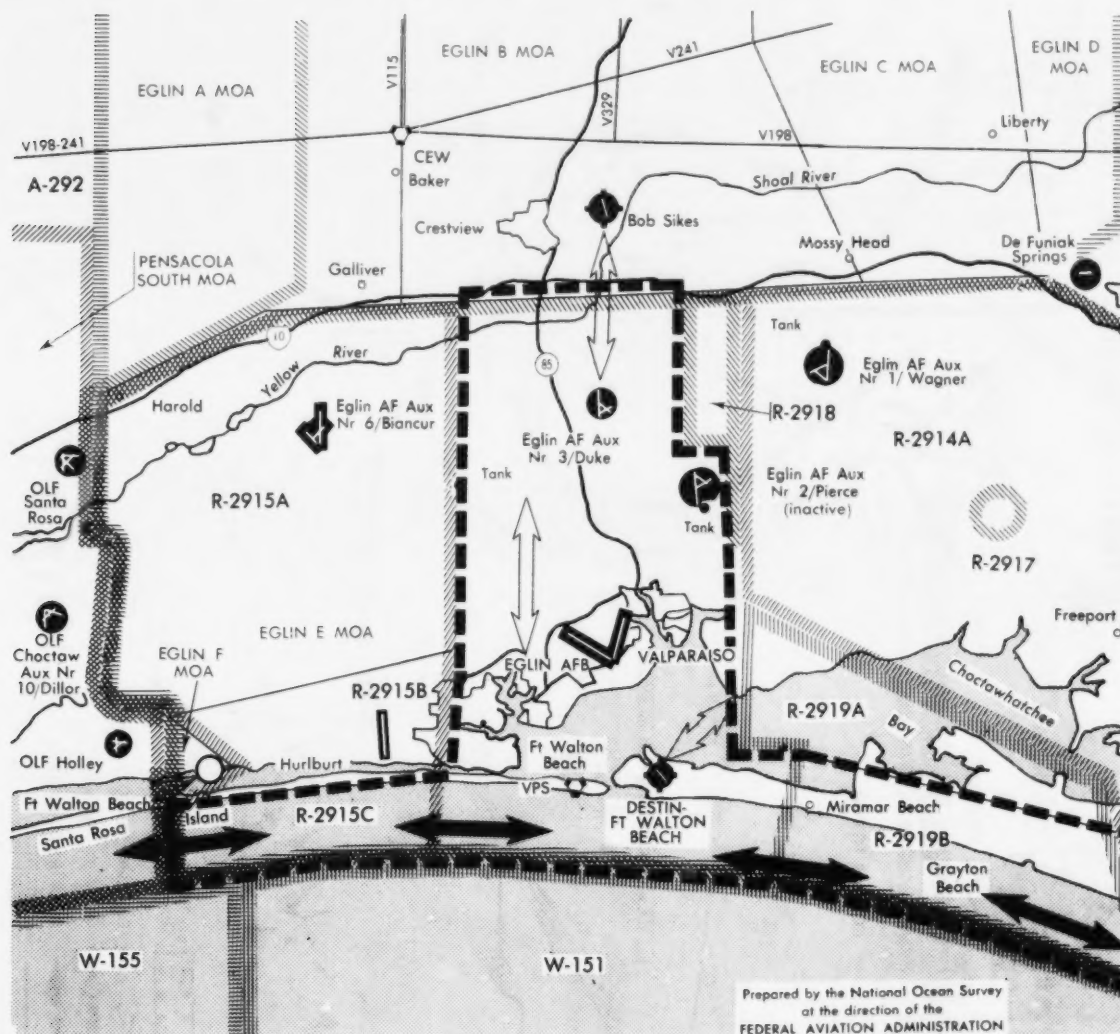
A SPECIAL RULE IN EFFECT REQUIRES PILOTS TO OBTAIN AN ATC CLEARANCE WHEN OPERATING IN AND OUT OF THE EGLIN/VALPARAISO, FLORIDA AREA.

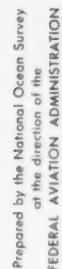
HI-DENSITY JET TRAFFIC 3000' AND BELOW

CLEARANCE REQUIRED PRIOR TO
ENTERING NORTH/SOUTH CORRIDOR
CONTACT EGLIN ON 119.3
RECOMMENDED N/S ROUTINGS -
3500' OR ABOVE

ADVISORIES REQUIRED PRIOR TO OPERATING
WITHIN EAST/WEST CORRIDOR
CONTACT EGLIN ON 119.3
RECOMMENDED E/W ROUTINGS - BELOW 8500'

(HEAVY DENSE JET TRAFFIC 3000' AND BELOW)



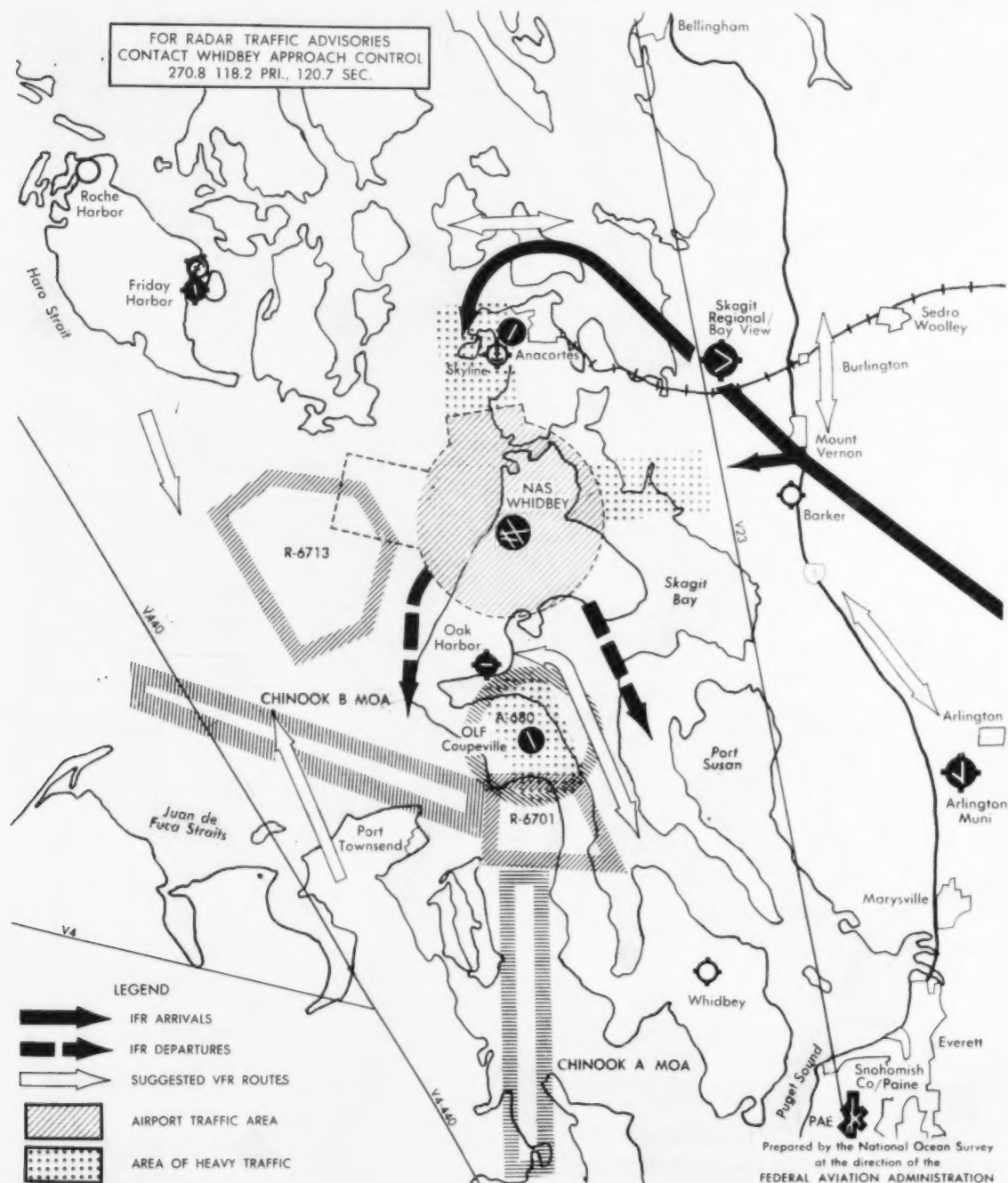


TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term-63

WHIDBEY ISLAND, NAS WASHINGTON

THIS CHART DEPICTS THE IFR ARRIVAL/DEPARTURE CORRIDORS SERVING NAS WHIDBEY FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR WITHIN THE AREA. PILOTS OPERATING WITHIN THIS AREA, ARE ENCOURAGED TO CONTACT WHIDBEY APPROACH CONTROL FOR TRAFFIC ADVISORIES.



WICHITA, KANSAS
McCONNELL AFB

V10-132-234
Burrton
Halstead
Sedgwick
V73E
V26
V77
V12
V73
V350
V12
V256
V73
V354

FOR RADAR ADVISORY INFORMATION SEE WICHITA TRSA NOTICE

WICHITA MID-CONTINENT
Westport
Westport Aux
Haysville
McCONNELL AFB
Cessna Aircraft
Beech Factory
A-683
Cook
Rose Hill
Copeland
Bentley
El Dorado Muni
Augusta Muni
Winfield
Strother
Oxford
Wellington Muni

EXTENSIVE PRODUCTION FLIGHT TESTING N, NE, E, SE OF WICHITA AREA UP TO 16,000' MSL OUT TO 100 MILES

-IMPORTANT-
ALL ARRIVALS TO CESSNA SHOULD MAINTAIN 1700' MSL WHEN WITHIN 5 MILES OF McCONNELL AFB

EUREKA LOW MOA

TRACY 1 MOA

LEGEND

- VFR CHECK POINT
- CONCENTRATED JET TRAFFIC AREA
- MAJOR JET ARRIVAL/DEPARTURE ROUTES
- SUGGESTED VFR ARRIVAL/DEPARTURE ROUTES 2000' MSL AND BELOW

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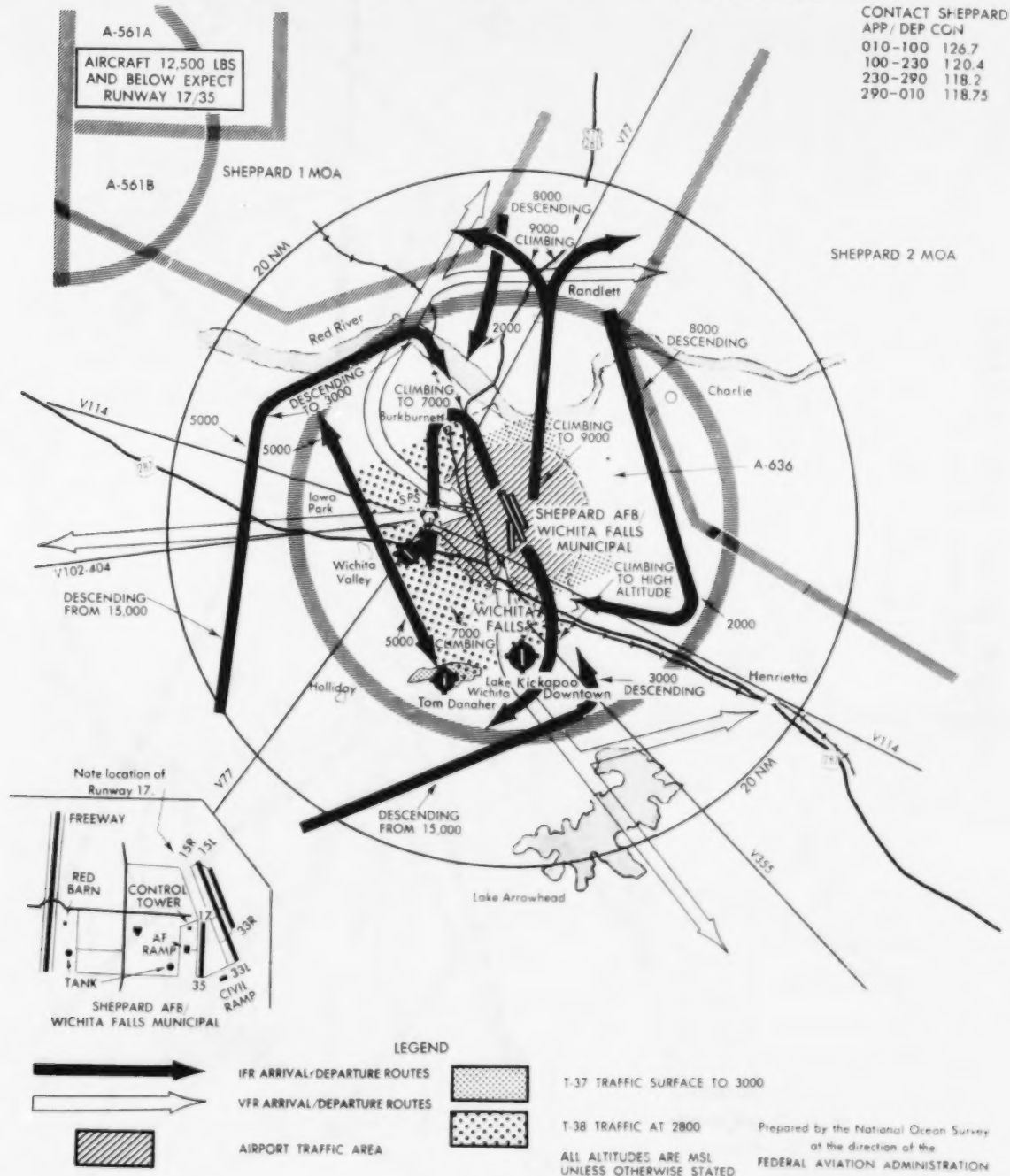
Prepared by the National Ocean Survey
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FEDERAL AVIATION ADMINISTRATION

TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

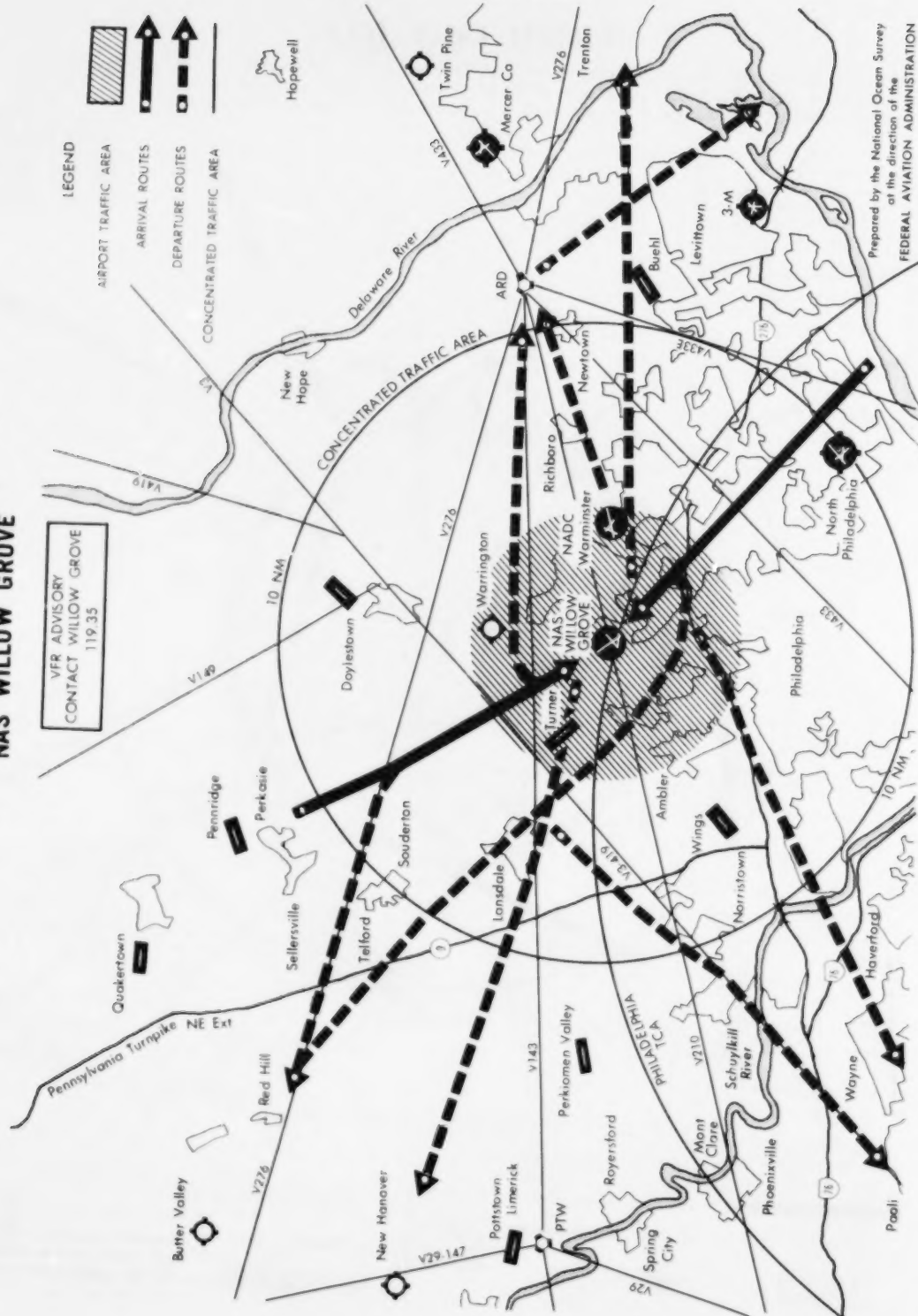
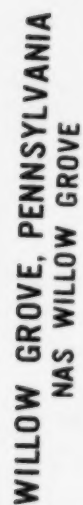
Term-65

WICHITA FALLS, TEXAS

THERE IS A HIGH VOLUME OF STUDENT JET OPERATIONS IN THE TERMINAL AREA. THE DARK ARROWS INDICATE JET IFR ARRIVAL AND DEPARTURE ROUTES THAT ARE MOST COMMONLY USED. RECOMMENDED VFR ARRIVAL AND DEPARTURE ROUTINGS ARE SHOWN BY THE LIGHT ARROWS. RECOMMEND VFR TRAFFIC STAY AT OR BELOW 2300 MSL IN VICINITY OF SHADED AREAS.



TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)



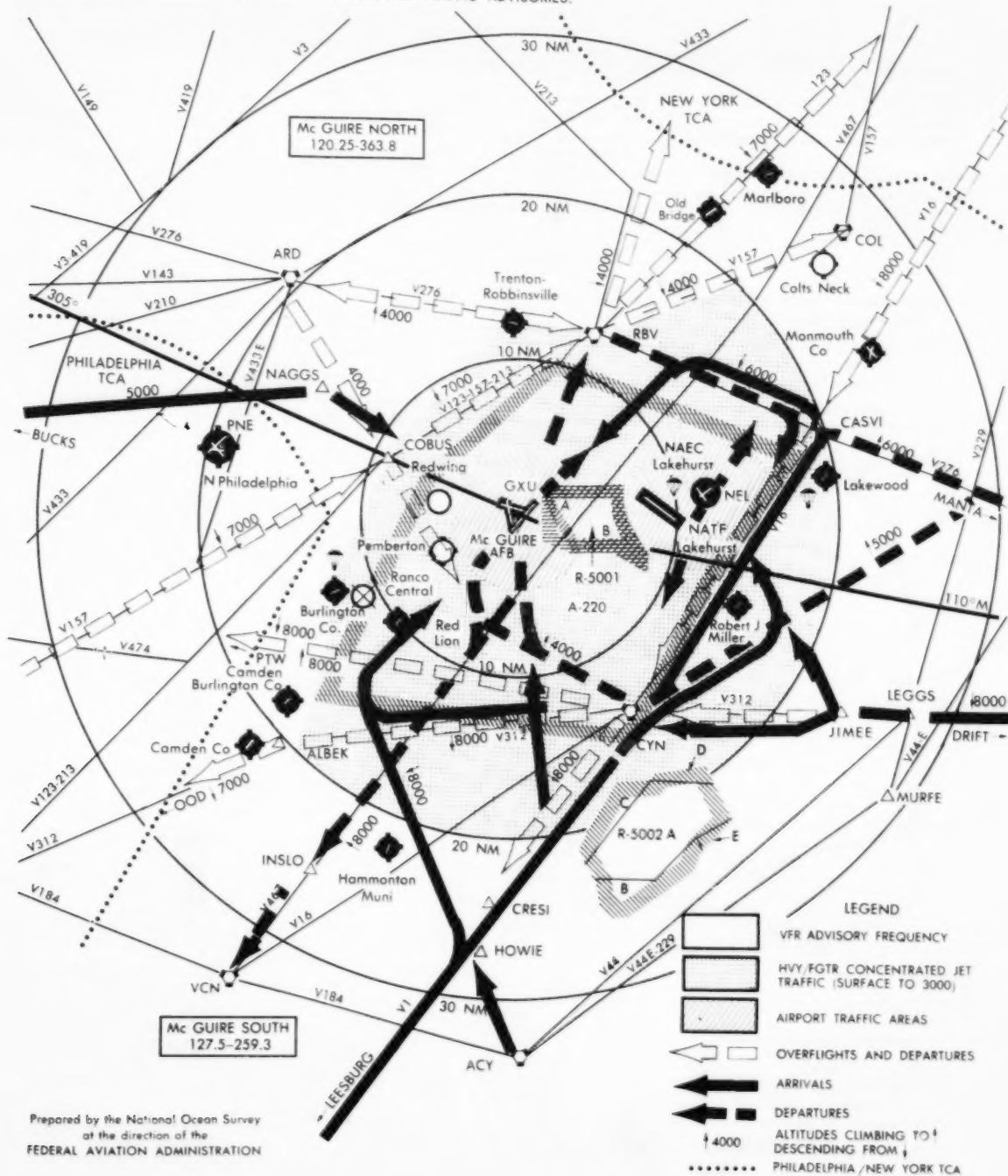
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TERMINAL AREA GRAPHIC NOTICE
(NOT TO BE USED FOR NAVIGATION)

Term-67

WRIGHTSTOWN, Mc GUIRE AFB, NJ

THIS CHART SHOWS AREAS OF CONCENTRATED IFR TRAFFIC FOR THE INFORMATION AND GUIDANCE OF PILOTS OPERATING VFR IN THE Mc GUIRE RADAR APPROACH CONTROL AREA. PILOTS OPERATING HEREIN ARE ENCOURAGED TO CONTACT Mc GUIRE APPROACH (APPROPRIATE SECTOR) FOR TRAFFIC ADVISORIES.



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TERMINAL AREA GRAPHIC NOTICE (NOT TO BE USED FOR NAVIGATION)

WASHINGTON NATIONAL AIRPORT NOISE ABATEMENT PROCEDURES

DEPARTURES

JET AIRCRAFT - From take-off climb to 1500'. At 1500' reduce power to a target setting computed for hot day conditions at maximum gross take-off weight to give approximately 500' FPM climb. (In lieu of 1500' as the point of power reduction, the 2 mile DME fix* when departing northwest or northeast or the 3 mile DME fix* when departing south may be used). Maintain reduced power until past a 10 mile DME arc*. Upon reaching the 10 mile DME arc*, gradually increase power to normal climb settings. Follow the Potomac or Anacostia River routes described below unless otherwise advised by ATC.

ATC CLEARANCE TO "CONTINUE CLIMB" IN NO WAY ELIMINATES THE REQUIREMENT TO COMPLY WITH NOISE ABATEMENT PROCEDURES, EXCEPT THAT THE SPECIFIC ATC INSTRUCTION TO "EXPEDITE CLIMB" RELEASES THE PILOT FROM FURTHER COMPLIANCE WITH NOISE ABATEMENT PROCEDURES.

NORTHWEST - Potomac River to abeam Georgetown Reservoir thence continue over the river or via 326° Radial* until past the 10 mile DME arc*.

NORTHEAST - Anacostia River to the 5 mile DME fix*, continuing at reduced power past a 10 mile DME arc*.

SOUTH - Potomac River to the 5 mile DME fix*, continuing at reduced power past a 10 mile DME arc*.

(*Washington (DCA) VOR/DME)

1 AND 2-ENGINE PROPELLER AIRCRAFT - Follow Potomac or Anacostia Rivers as appropriate. From take-off climb to 1500' prior to turning on course unless instructed to turn sooner by ATC.

4-ENGINE PROPELLER AIRCRAFT - Follow Potomac or Anacostia Rivers as appropriate. From take off climb to 2000' prior to turning on course unless instructed to turn sooner by ATC.

ARRIVALS

Aircraft shall be vectored so as to continue their approaches over the rivers while being spaced within the traffic flow.

Aircraft making IFR approaches from the northwest shall be cleared for a River Approach (Visual) when weather is 3500' and 3 miles or better. Radar vectors will be provided to the final approach course. When cleared for a River Approach, aircraft may visually follow the river to the airport or may proceed via the DCA VOR 326° radial (146° inbound) or via the LDA RWY 18 approach to abeam Georgetown Reservoir or the DCA 4 mile DME, then visually follow the river to the airport.

A light on Memorial Bridge is installed to assist pilots in staying over the Potomac River during approaches from the northwest.

Aircraft making IFR approaches from the south shall be cleared for a Mount Vernon Approach (Visual) when weather is 3000' and 4 miles or better. When cleared, aircraft will proceed inbound via 187° radial* (007° inbound) to abeam Oxon NDB or 5.6 DME fix*, then will visually follow the river to the airport.

(*Washington (DCA) VOR/DME)





**Flight Information Publication
Graphic Notices and Supplemental Data**

U.S. Department
of Transportation

**Federal Aviation
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